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GRAPHIC ACKNOWLEDGMENTS

Station Area Plans and Illustrations: UDA*

Station Plans - Brooklyn Boulevard, 85th Avenue, 93rd

Avenue, and Oak Grove Parkway: SRF/Kimley-Horn

Renderings of Proposed Streetscape Elements: Kimley-Horn

Station Architecture Images: Miller Dunwiddie

*Note: graphics by UDA include:

- Page 6: Figures 1.2-1.8
- Page 11: Figure 3.1
- Page 12: Figure 3.2
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Executive Summary

As part of the METRO Blue Line Extension (Bottineau Light Rail Transit, (BLRT), West Broadway Avenue through Brooklyn Park will be completely reconstructed as a multi-modal transit corridor supporting Light Rail Transit (LRT), pedestrian, and bicycle connections. Hennepin County, Metropolitan Council and the City of Brooklyn Park are working together to coordinate all components of this work to create a unified vision.

This manual is the result of a yearlong interdisciplinary collaboration between the City Council and Staff, the BLRT Design Resolution Team (DRT), the citizens of the City of Brooklyn Park, and consulting teams.

PURPOSE

The primary purpose of the process and this Streetscape Design Framework Manual is to advance the project and to assist with decision making by:

- Defining a vision that is responsive to City, County, and Community concerns and ensures that the multi-modal infrastructure improvements are effectively integrated within the community.
- Ensuring that the West Broadway Streetscape is in alignment with the multi-modal corridor vision.
- Identifying what streetscape elements are included and paid for in the base corridor reconstruction BLRT project.
- Defining streetscape element options that are enhancements to the base project, and which agencies are considering participating in funding.

OBJECTIVES

The primary objectives of this document are to:

- Provide a summary document of the West Broadway streetscape design visioning process and design recommendations.
- Provide a flexible palette of streetscape components that provide continuity while responding to changing scenarios within each district.
- Provide a consistent armature that accommodates layers of change, activity, and corridor evolution.

- Contribute to the success of the corridor by providing a catalyst for reinvestment and community support in future projects that leverage the LRT and CSAH 103 reconstruction investments.
- Define simple but impactful design opportunities and strategies that express community identity and cultural character.
- Create a "kit of parts" and a flexible framework for decision making to guide and ensure public and private improvements are consistent with the vision of the community.

BENEFITS

A key benefit of the design process and this summary document is the creation of a solid community based foundation and framework from which decision makers may assess funding, ownership, and maintenance commitments.

As of this writing this framework manual has already been used to:

- Inform 90 percent design plans for BLRT and CSAH 103 reconstruction including determining which enhancements will be part of the construction documents and those to be implemented by others.
- Determine cost participation strategies for agency partners.
- Provide guidance to the Brooklyn Park City Staff and City Council for the selection of streetscape elements; determination of costs; and development of maintenance strategies.
- Coordinate with Xcel Energy to reduce the number of transmission line poles within the Grand Boulevard north of Highway 610.
- Assist adjacent property owners with making informed decisions regarding their property and understanding how it fits into the future design of the corridor.
- Shape a collaboration between the City of Brooklyn Park and property owners on the planning for the public market space at Brooklyn Boulevard
- Provide a public realm framework for Transit Oriented Design TOD ordinances around the station areas.

DESIGN RECOMMENDATIONS

This West Broadway Streetscape Design Framework builds on the principles and recommendations outlined in the 2016 Station Area Plan by providing streetscape guidelines that reflect the Community's identity and "character districts," while providing a unified approach to landscaping, lighting, fencing and other streetscape elements. Key design recommendations include:

75TH AVENUE GATEWAY

The proposed LRT tracks will merge with West Broadway Avenue between 74th and 75th Avenues shaping the south gateway and first impressions of the corridor.

Recommendations include enhancing the gateway by strategically placing buildings to shape street edges, open spaces, and to screen parking.

BROOKLYN BOULEVARD

The combination of the proposed LRT station, bus stops and bicycle facilities, available ROW and redevelopment opportunities will create an active crossroads for users moving to and from businesses, transit facilities and residents.

Recommendations include redesigning underutilized ROW and setback areas into multi-purpose plazas. The existing farmers market and other recommended markets could move to these spaces to be more visible, activate the street, and be more accessible to pedestrians walking to and from transit facilities. Public art competitions and urban prototyping events are recommended to leverage regional talent and generate community involvement and excitement for the project.



Figure 1.1 - Proposed streeetscape treatment at 76th Ave. N.

SHINGLE CREEK

The Shingle Creek Corridor offers a beautiful natural amenity and connection to regional trails. The BLRT construction process creates an opportunity to celebrate and improve visual and physical access to this natural amenity.

Recommendations include an overlook on both the east and west sides of West Broadway to provide views directly into the creek corridor and a rest area for pedestrians and cyclists midway between bus and LRT stations.



Figure 1.2 - Shingle Creek Overlook

Executive Summary

85TH AVENUE

The streetscape and station should express the arts & education quality of the area and its civic character.

Key recommendations include integrating the streetscape and potential plaza areas to improve anticipated heavy pedestrian traffic as both bus and light rail users will enter the campus from this location.

93RD AVENUE

This district is characterized as a main employment center within Brooklyn Park. A primary goal for the streetscape is to attract transit users and enhance pedestrian/bike connections to surrounding business centers, Oak Grove, neighborhoods and potential new development.

Recommendations include: extend streetscape treatments along 93rd Avenue to improve the walking and biking experience, as well as enhance this corridor as a link connecting transit, employment, and retail; incorporate public art and/or other elements that will strengthen this districts identity as a center of employment and innovation; improve corners of the 93rd Avenue intersection to create green spaces for employees and other users.

GRAND BOULEVARD PLACEMAKING-CENTRAL OPEN SPACE AMENITY

The vision for the Oak Grove Station Area is to develop a signature mixed-use district that is anchored by corporate office uses and supported by a retail main street, housing, parks, trails, and the BLRT station. A key goal for the streetscape treatment of West Broadway and the Grand Boulevard is to design short term improvements to accommodate long term placemaking initiatives as the area evolves and infills with businesses, residents, workers and visitors.

Recommendations for this area include: treat the Grand Boulevard as a gateway to the Oak Grove District; create a flexible open space to accommodate a variety of daily and year- round uses and provides an amenity to attract and retain business and residents to the area; express the natural landscape by utilizing prairie and woodland treatments on fringes that evolve to more refined treatments within the central median and the corporate entrance to Target along Oak Grove Parkway.



Figure 1.3 - Typical streetscape at North Hennepin Community College

IMPLEMENTATION STRATEGIES

Through March and April 2017, the Brooklyn Park City Council and City staff held a series of workshops to review the streetscape options and to make informed selections for enhancements. A comprehensive outline of the streetscape enhancement options, associated quantities, estimated costs, and potential funding participation was created as a separate document to assist with decisions regarding investments in the public improvements.

The West Broadway Streetscape Framework Manual has identified a preliminary time frame for implementing the streetscape design, which falls into three categories: short-term improvements to be built with the BLRT Project; mid-term improvements to be implemented outside of the BLRT project; and long-term improvements that will evolve as the corridor redevelops.

The implementation strategies include action steps to integrate the improvements into an ongoing community-building strategy, and to gain the most benefit from transportation and streetscape improvements. Primary next steps include:

ADOPT TRANSIT ORIENTED DEVELOPMENT (TOD) ORDINANCE FOR STATION AREAS

As recommended in the Brooklyn Park Station Area Plan, a TOD ordinance should be adopted by the City of Brooklyn Park for the areas within a half mile of each station. This ordinance is critical for successful redevelopment that strategically aligns public and private investments to support transit-oriented development (TOD) through catalytic projects such as life-cycle housing, commercial development, and public infrastructure. The ordinance will need to reinforce the relationship of future development to the West Broadway streetscape by addressing the following:

- "Build To" lines, building massing, materials, and land uses that shape a pedestrian scaled corridor and promote an active center of activity while directing safe pedestrian and bicycle movements.
- Placement of parking facilities and buffers to enhance the image of the area.

- Shaping the South Gateway at 74th Avenue by strategically placing buildings, open spaces, and storm water facilities.
- Strategic incorporation of open spaces adjacent to the corridor such as the market at Brooklyn Boulevard and the Fine Arts Plaza at 85th Avenue.

BROOKLYN BOULEVARD CORNER TREATMENTS: PUBLIC ART, EVENTS, AND INSTALLATIONS

The West Broadway Streetscape presents the City of Brooklyn Park an opportunity to create innovative policies and procedures to integrate art that is informed by contemporary best practices for public art processes.

COORDINATE OBJECTIVES WITH ALL CITY DEPARTMENTS AND PLACE PROJECTS IN THE CAPITOL IMPROVEMENT PLANS

The planning, engineering, and inspections departments should refer to the guidelines and associated public/private improvements when reviewing individual development proposals. Each proposed development should comply with the guidelines, reinforce the desired character of development, and contribute to creating a cohesive, pedestrian-friendly, memorable, and economically viable place.

City departments should refer to the components in this manual to coordinate, design, and budget for capital improvements and to design public/private partnerships to finance and maintain public realm projects.

Introduction & Background

PROJECT INTRODUCTION

As part of the METRO Blue Line Extension (Bottineau Light Rail Transit, BLRT), West Broadway Avenue through Brooklyn Park will be completely reconstructed as a multi-modal transit corridor supporting LRT, pedestrian, and bicycle connections. The timeline for the road reconstruction project and the METRO Blue Line Extension are closely aligned with service to begin in 2022. Hennepin County, Metropolitan Council and the City of Brooklyn Park are working together to coordinate all components of this work to create a unified vision within the 3.5 miles of West Broadway between 74th Avenue to the south and Winnetka Avenue to the north.

The primary purpose of the Streetscape Design Framework Manual is to advance the project and assist with decision making by:

- Defining what streetscape elements are included and paid for in the base corridor reconstruction project.
- Defining options and cost estimates of streetscape elements that are enhancements to the base project, and which agencies are considering participation in their funding.

In the short term, critical decisions need to be made with regard to which enhancements will be included as part of the construction documents for the BLRT project and which enhancements will be designated as mid or long term projects implemented outside of the project by the City.

The primary objectives of this document are as follows:

- Provide a summary document of the West Broadway streetscape visioning process and design recommendations.
- Provide continuity through a flexible palette of streetscape components that respond to changing scenarios within each district.
- Provide a consistent armature that accommodates layers of change, activity, and corridor evolution.
- Contribute to the success of the corridor by providing a catalyst for reinvestment and community support in future projects that leverage the LRT investment.
- Define simple but impactful design opportunities and strategies that express community identity and cultural character.

- Create a "kit of parts" and a flexible framework for decision making to guide and ensure public and private improvements are consistent with the vision of the community.
- Provide recommendations for prioritizing short, mid, and long-term improvements, prepare cost estimates, potential funding sources, and responsibilities to implement the plan elements over time.

PROCESS

This West Broadway streetscape framework manual is the result of a 6-month interdisciplinary collaboration between the City Staff, BLRT Design Resolution Team (DRT), the community of Brooklyn Park, and consulting teams. The mission of the process was to define a vision that is responsive to stakeholders' concerns and ensures that the LRT infrastructure is effectively integrated with the surrounding community. The DRT was the principle group guiding the process and consists of key representatives of the Brooklyn Park City Staff, Metro Transit, Hennepin County, and the BLRT project team. Community stakeholders were involved through participation in individual property owner meetings, public open houses, and visual preference surveys.

BLUE LINE OVERVIEW

The METRO Blue Line Extension, also known as the Bottineau Light Rail Transit (Bottineau LRT), is a proposed 13-mile expansion of the existing METRO Blue Line in the Twin Cities area of Minnesota. The Bottineau LRT will extend from downtown Minneapolis through north Minneapolis, Golden Valley, Robbinsdale, Crystal, and Brooklyn Park, serving the northwest Twin Cities metro. The Bottineau LRT will link local and express bus routes, and will seamlessly connect to the regional transitway system at Target Field Station in downtown Minneapolis.

The Hennepin County Bottineau LRT Community Works program was established in 2014 to leverage this important regional transit investment by partnering with cities along the Bottineau LRT line to help plan for, and implement, critical changes "beyond the rails."

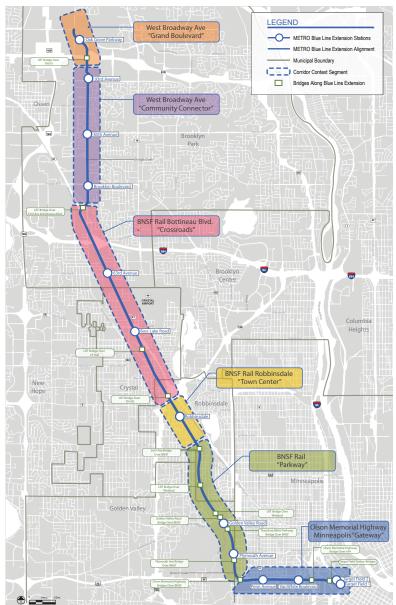


Figure 1.4 - Blue Line Extension Corridor Map

INITIAL GOALS OF THE PROGRAM ARE TO:

- Re-envision the Bottineau Corridor as a multimodal transit corridor that supports LRT, pedestrian, and bicycle connections.
- Maximize and strategically align public and private investments in the corridor to support transit-oriented development (TOD) through catalytic investments in life-cycle housing, commercial development, and public infrastructure.
- Promote economic opportunity by improving access to jobs and supporting business recruitment and expansion along the corridor.
- Enhance livability in the corridor by improving public spaces, supporting the creation of healthy communities, and connecting people to key destinations, including employment centers, educational institutions, and regional amenities.

Introduction & Background

Previously prepared reports, studies, and other documents pertinent to the West Broadway Streetscape have been assembled and reviewed to gain an understanding of key findings, objectives, and policies that may influence the streetscape design. The studies include:

- Brooklyn Park Station Area Plans, UDA, February 2016
- Bottineau LRT/Metro Blue Line Extension Bicycle Study, Nelson Nygaard 2016 Final Draft
- Bicycle Facility Assessment (Draft), METRO Blue Line Extension White Paper
- City of Brooklyn Park, Parks and Recreation, and Land Use plan
- NHCC Master Plan
- Placemaking Residency, Planning Culturally Inclusive Places and Economic Development along the METRO Blue Line Extension, Brooklyn Boulevard Station, May 11, 2016 Summary notes
- Brooklyn Park Station Design Meeting: Context and Character Workshop, June 22, 2016
- Maintenance Summit, July 12, 2016

BUILD ON PREVIOUS STUDIES

The Brooklyn Park Station Area Plan, produced by Urban Design Associates (UDA) in 2016, examines the area within a half-mile radius, or a ten-minute walk, of each proposed LRT station. The plan documents the station area planning process and illustrates a short and long-term vision for the station areas that reflect the community's goals, ensures that the LRT infrastructure is effectively integrated with the surrounding community, and helps the community take advantage of this new transit investment.

As stated in the plan,

"the City, Hennepin County, and other area stakeholders are looking forward to seeing Brooklyn Park built-out as a "better" version of what it is today — a diverse suburban community that is "unique, united, and undiscovered" with unexpected vitality and opportunity".



Figure 1.5 - Oak Grove Parkway



Figure 1.9 - Oak Grove Parkway

The planning process was a joint effort between Hennepin County and the City of Brooklyn Park and addresses and station

Brooklyn Boulevard, 85th Avenue, 93rd Avenue, and Oak Grove Parkway. The Brooklyn Park Station Area Plan should be

access needs, future land use implications, and placemaking considerations for the five stations in Brooklyn Park: 63rd Avenue,

referred to for a more comprehensive description of the Station Area Plans, the planning process, background analysis, market

Figure 1.6 - 93rd Avenue



Figure 1.7 - 85th Avenue



Figure 1.8 - Brooklyn Boulevara



forecasts, community health benefits and redevelopment strategies.

Figure 1.10 - 85th Avenue



Figure 1.11 - Brooklyn Boulevard

The Station Area Plan is grounded on the following:

STATION AREA PLAN GUIDING PRINCIPLES

PLACE MAKING

- Transform West Broadway Avenue into a beautiful multi-modal main street.
- Reinforce Brooklyn Park's "Hometown Feel".
- Create a unique sense of place at each station in terms of character and predominant land use.
- Implement consistent fencing, lighting, and landscape standards along West Broadway Avenue.

CONNECTIVITY

- Connect all modes of transportation at light rail stations.
- Encourage pedestrian and bike friendly crosswalks.
- Create walkable and bikeable arterials.

LAND USE

- Consider transit oriented zoning to encourage transit oriented development.
- Take advantage of compact building design and reduced parking requirements within a half-mile radius of stations.
- Allow for targeted mixing of land uses.
- Create a range of housing opportunities and choices.

Design Approach

CHARACTER DISTRICTS

The Station Area Plan identified the predominant character of each district based on the current and proposed land uses, development patterns and character. The districts include:

BROOKLYN BOULEVARD - RETAIL HUB

This district begins in the south gateway area at 74th Avenue and extends through the heart of the retail area at Brooklyn Boulevard north to approximately Shingle Creek.

85TH AVENUE - INSTITUTIONAL

This district is defined on the south by Shingle Creek, and 89th Avenue to the north. The focus of this district is at 85th Avenue with the North Hennepin Community Technical College and the Hennepin County library campuses occupying most of the eastern half. Other land uses include a small commercial area and low and medium density residential.

93RD AVENUE - EMPLOYMENT

This district is characterized as a main employment center within Brooklyn Park with a business park as the dominant land use. The district is defined by 89th Avenue to the south and Hwy 610 to the north.

OAK GROVE - MIXED-USE

The Oak Grove Area from Highway 610 on the south to Winnetka Avenue to the North is home to the Target Corporation campus and one of the largest opportunity sites in the region.

The proposed stations fall generally within the central areas of each segment. Participants in "context and character" workshops describe each of the station areas' unique characteristics. The design of the proposed streetscape and station architecture respond in part to these character district descriptions.

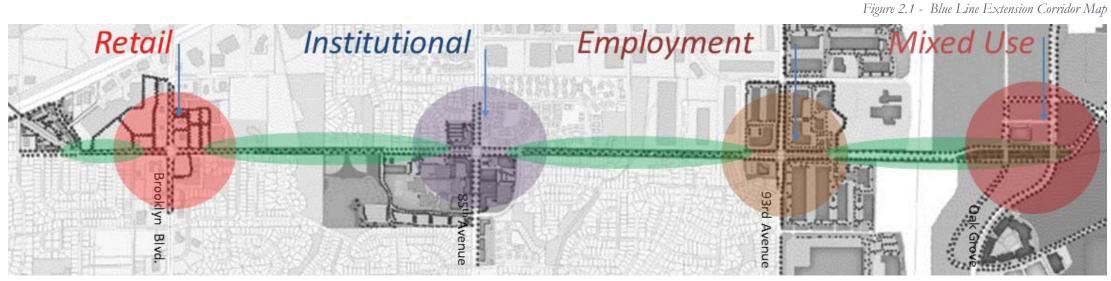
APPROACH TO THE STREETSCAPE DESIGN

This West Broadway Streetscape Design Framework builds on the guiding principles and recommendations outlined in the 2016 Station Area Plan by providing streetscape guidelines that reflect the community's identity and character districts, and creates a unified approach to landscaping, lighting, fencing and other streetscape elements.

Three design approaches to the entire West Broadway Avenue corridor were explored with the Design Resolution Team (DRT). The DRT was asked to choose one of the following three approaches that best describes the vision of the corridor:

- 1. Provide a consistent appearance of elements throughout the entire corridor,
- 2. Provide elements that express individual identity of each district,
- 3. Create a separate and distinct identity for the Oak Grove district, provide a consistent identity south of Highway 610

The preference of the participants was Option 2: consistent appearance of elements throughout the entire corridor and include some elements that express individual identity of each district.



BROOKLYN BOULEVARD

- Timeless
- Make 100% corner fabulous
- Colorful, vibrant
- Cultural
- Expression of community
- Contemporary

85TH AVENUE

- Station blends with progressive modern architecture
- Future arts and education feel
- Civic character the cultural hub
- Traditional character
- Community focus

93RD AVENUE

- Design shouldn't overcompensate/ be too fancy or overdone
- Understated
- Industrial character
- Public art related to innovation/ employment
- Need focal point

OAK GROVE PARKWAY

- People centered, inviting, warm, active
- Place to be, huburb
- Modern, contemporary
- Nature, green, parks (Rush Creek Trail), edge of development
- Urban grand place
- City centered

Design Approach

STREETSCAPE CHARACTER PREFERENCES

Visual preference surveys were conducted during property owners meetings, a community workshop and open house as well as with the Design Resolution Team (DRT) to define the community preferences for the character of the West Broadway streetscape components. At each workshop the participants were asked to vote on three different families of street furnishing representing contemporary, timeless and traditional qualities.

The components representing a more timeless to contemporary style garnered the most votes from the participants.

CONTEMPORARY STREETSCAPE ELEMENTS

The "contemporary" components relate to the modern character of the new Hennepin County Library at 85th Avenue and a more progressive, fresh image for West Broadway.











Figure 2.2 - Contemporary Streetscape Element Examples



The "Timeless" family of elements represent updated versions of lighting and street furnishings that will complement the contemporary quality of the proposed station architecture and library, as well as the existing commercial buildings and residential neighborhoods.











Figure 2.3 - Timeless Streetscape Element Examples











Figure 2.4 - Traditional Streetscape Element Examples

TRADITIONAL STREETSCAPE ELEMENTS

The "Traditional" family of elements represent versions of lighting and street furnishings that would complement the style of furnishing utilized in existing streetscapes in Brooklyn Park such as West Broadway at Bass Lake Road.

Design Approach

CORRIDOR STREETSCAPE ENHANCEMENTS

One of the primary objectives of this manual is to define what streetscape elements are enhancements which will not be paid for by the BLRT/County corridor construction project.

BASE STREETSCAPE TREATMENT

The base streetscape project to be built with the BLRT and street reconstruction project includes the following elements:

- Concrete pavement for all corners as illustrated in Figure 2.6
- Concrete pavement on both sides of the street for mixed use trails on the blocks with the station platform
- Bituminous pavement for the trails outside of the station blocks
- Turf for boulevards and areas between the back of walk and right-of-way
- Roadway intersection lighting
- Stormwater treatments
- A 6 foot wood fence will be along the right-of-way in residential areas
- Bike racks
- Bus shelters
- Replacement tree and lights



Figure 2.5 - Base Streetscape Example at Station Block

CORRIDOR WIDE ENHANCEMENTS

Enhancements common to the full corridor consist of streetscape elements that are not in the base LRT and road reconstruction project. These elements will be funded primarily by the City of Brooklyn Park and others outside of Hennepin County and Bottineau Light Rail Transit. Options for all the enhancements are discussed in the following chapters. Corridor wide enhancements include:

- Burying electrical distribution lines
- Street trees
- Shrubs and perennials
- Irrigation (boulevards at station blocks and one block north and south)
- Pedestrian scale lighting
- Decorative specialty lighting at station areas
- Colored concrete banding at corners
- Synthetic residential fencing

ENHANCEMENTS SPECIFIC TO VARIOUS SEGMENTS OF THE CORRIDOR

- Trail seating nodes
- Special corner treatments at Brooklyn Boulevard, 85th Avenue, and 93rd Avenue
- Sidewalk market at Brooklyn Boulevard
- Cross street median and boulevard treatments at Brooklyn Boulevard, 85th Avenue, 93rd Avenue, and 93rd Avenue
- Shingle Creek overlooks
- Benches and trash/recycling receptacles
- Community and/or corridor identity elements
- Public art

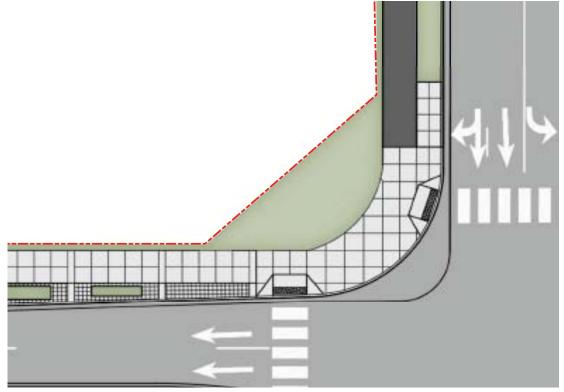


Figure 2.6 - Base Corner Streetscape Treatment



Figure 2.7 - Base Streetscape Treatment, Residential Area



Figure 2.8 - Residential Streetscape Enhancement



Figure 2.9 - Base Streetscape Treatment, Commercial Area



Figure~2.10-Commercial Street scape Enhancement

Brooklyn Boulevard

STATION AREA PLAN

As described in the Station Area Plan:

"The Brooklyn Boulevard Station is located in the center of an existing healthy and diverse retail environment. Residents emphasized that "everybody shops here." The age and condition of the buildings allow for a wide variety of commercial uses — something that residents and stakeholders noted as very positive. There is consensus that the addition of light rail will strengthen the commercial environment. It will also support new types of uses over time. A transit oriented development (TOD) overlay is also recommended for the commercial property around the Brooklyn Boulevard Station. The goal is to give property owners additional flexibility/incentives to diversify and densify uses."

STREETSCAPE DESIGN OBJECTIVES

- Improve the gateway area at 75th Avenue through open space design, strategic building placement, landscape treatments, public art and/or community identification elements.
- Create a timeless, vibrant character that provides opportunities for community and cultural expression.
- Buffer views to commercial parking lots
- Create plaza areas at the four corners of the Brooklyn Boulevard intersection where the City can define designs that welcome visitors and express a unique identity.
- Improve pedestrian connections between the LRT station, transit center, shopping centers and neighborhoods.
- Anticipate future infill redevelopment up to the street right-of-way.
- Provide visual cues to direct pedestrians and bicyclists in and around bus stops as well as to safe crossings at the intersections

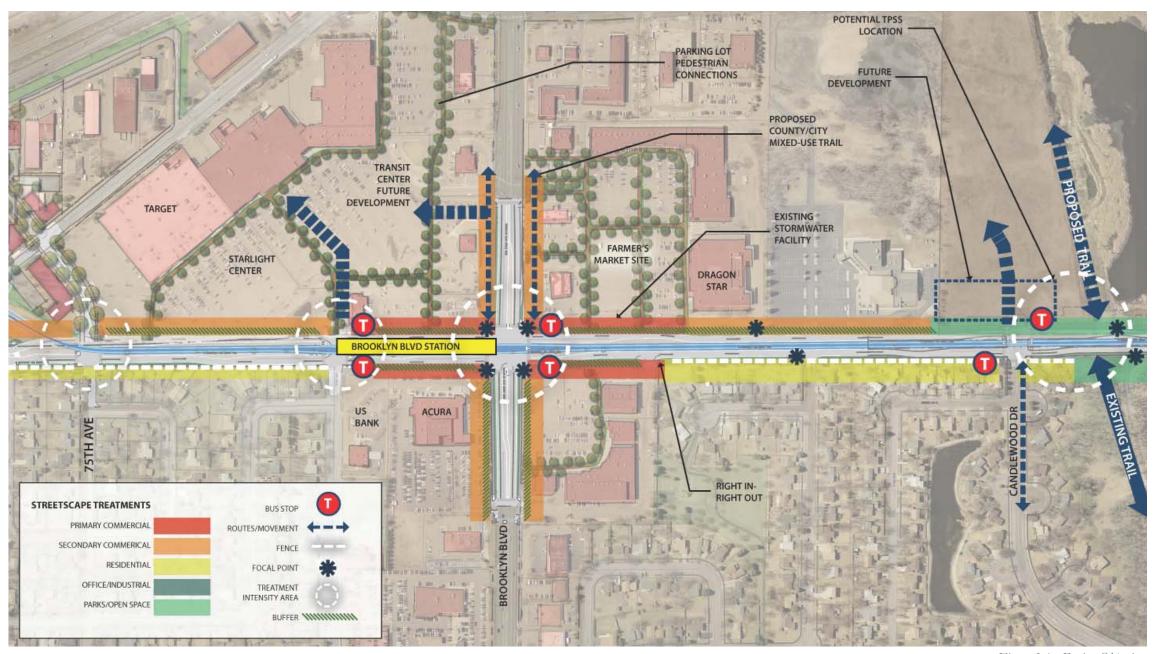


Figure 3.1 - Design Objectives

Brooklyn Boulevard

75TH AVENUE GATEWAY

The proposed LRT tracks will merge with West Broadway Avenue between 74th and 75th Avenues North. The train will touch down to street level at this intersection after descending from the elevated tracks over Highway 81 to the west. The intersection will form the first impressions and south gateway to the West Broadway Corridor.

- This will be a complicated intersection with crisscrossing tracks, streets and trails. The streetscape should be simple and add clarity to pedestrian and vehicular movements, as well as provide sight lines to signals and signs.
- Enhance the gateway by strategically placing buildings to shape street edges, open spaces, and screen parking as illustrated in the redevelopment plan for neighboring properties prepared by UDA.
- The garden space at the south side of the intersection indicated in the UDA plan acts as a focal point for users entering and exiting West Broadway Avenue. This would be a good location for a community identity element.



Figure 3.2 - Potential Gateway Redevelopment Plan



Figure 3.3 - Character of Potential Infill Development at South Gateway

Brooklyn Boulevard

COMMERCIAL PARKING LOT FRONTAGE

One of the objectives of the streetscape is to provide solutions for parking lot edges that buffer views to parking lots that are flexible and may adapt to a variety of site conditions and budget constraints. The typical section between the street curb and right-of-way includes an 8 foot boulevard, 10 foot wide trail and 2 foot clear zone. In many scenarios, the space between the right of way and the parking lot curbs is 4 to 6 feet wide. This is a tight urban condition that provides a minimal amount of space for a clear zone, buffer elements, snow storage and in some cases bumper overhangs.

- To enhance the image of the area, parking lot buffers are proposed along all the parking lot frontage. The buffers can be a combination of low walls, decorative railings, bollards, trees and other plant materials. See Figure 3.7, Figure 3.8, Figure 3.9, Figure 3.10. The City zoning ordinance requires a 15 foot setback and screening of parking lots. These recommended treatments are intended to mitigate the loss of landscape screening and setback areas.
- Given the narrow width of the buffer areas, overstory trees will be one
 of the most important elements because they provide visual impact,
 tolerate snow storage, and provide vertical clearance for trail users.
 Perennial ground layer materials are recommended in conjunction with
 overstory trees to provide effective visual buffers during the warm
 months and die off in the winter to accommodate snow storage.
- Decorative railings, walls, and/or bollards are recommended to provide a more permanent buffer at highly visible areas such as Target's parking lot entry points and the space between the McDonald's drive thru and the bus stop. Refer to 'Streetscape Elements' chapter for additional examples.

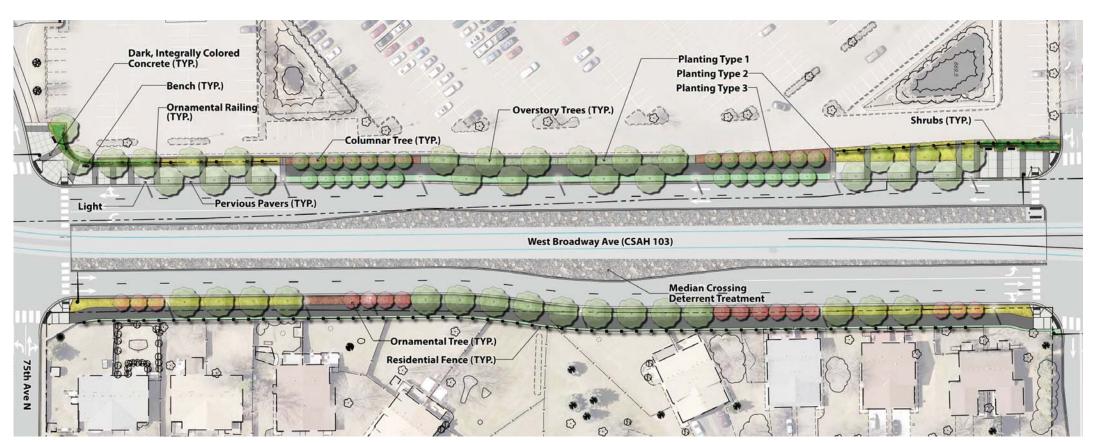


Figure 3.4 - Target Commercial Area



Figure 3.5 - Commercial Parking Lot Frontage: Decorative Railing Option

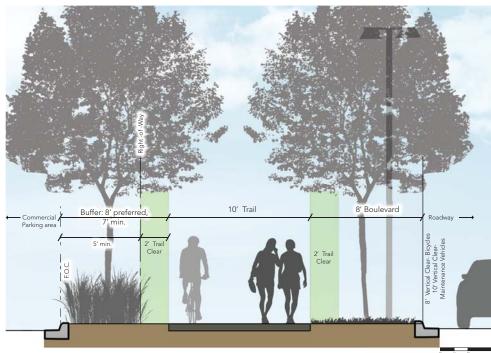


Figure 3.6 - Typical Commercial Parking Buffer Section

Brooklyn Boulevard

RESIDENTIAL FENCING

Fencing along the residential properties impacted by the West Broadway reconstruction project is possibly the highest priority streetscape improvement. The design objective is to create a cohesive, low maintenance, and visually pleasing screen that gives residents privacy and a secure property line. Fencing alternatives are discussed and illustrated in the 'Streetscape Elements' section of this document.

RECOMMENDATION

The fencing will be placed just behind the property line leaving approximately 2 feet for a clear zone to the edge of the mixed-use trail. This space should be planted with large swaths of native perennials, grasses, and vines to visually break-up the long expanses of fence. These plants will go dormant in the winter to accommodate snow storage needs.



Figure 3.7 - Residential Fencing

Brooklyn Boulevard

BROOKLYN BOULEVARD STATION

Character and Context Workshop descriptions include: Diversity, Commercial Hub, Vibrant, Destination, Transit Connections, Wayfinding, and Visibility. Through strong form and colors, this modern station design connects, responds to, and stands out in this active, predominantly retail context. Additional design attributes include:

- Primary access is at the Brooklyn Boulevard intersection and secondary access is from the 76th Avenue intersection, both of which are signalized. The intersections are being redesigned to shorten and improve pedestrian crossings.
- On-street bus stops serving multiple routes are located on West Broadway Avenue near 76th Avenue to facilitate convenient transfers to LRT.
- Bike parking areas are provided at both the southwest and southeast corners of the Brooklyn Blvd intersection.

Other BLRT Project area improvements include:

- Pedestrian-crossing deterrent barriers on both sides of station platform mid-block to guide pedestrians to safer crossing areas
- Lighting

The station experience is integrated with the surrounding streetscape.



Figure 3.8 - Station Plan

BUSY



Figure 3.9 - Existing Intersection of West Broadway and Brooklyn Boulevard



Figure 3.10 - Preliminary Station and Platform Design

Figure 3.11 - Character and Context Workshop Descriptions

Brooklyn Boulevard

CORNER TREATMENTS

As mentioned in the Station Area Plans, small open spaces will be created at all four corners of the Brooklyn Boulevard intersection by removing the "pork chop" islands for right turns. These corners provide opportunities to create small plazas that could include elements that welcome visitors, improve pedestrian connections between the LRT station, provide transit and shopping centers, and revitalize neighborhoods, and incorporate pubic art that expresses community and cultural identity.

These corners serve many roles. They are the primary points of orientation for pedestrians and bicyclists, provide passive places to rest and gather, and offer space for markers, events, public art, or other elements that express cultural and community identity.

POTENTIAL ENHANCEMENTS

Figure 3.15, Figure 3.16, and Figure 3.17 illustrate a combination of the base streetscape treatment for the station block with the addition of street trees, parking lot buffers, pedestrian level lighting, specialty lighting in the boulevards at corners, and ground layer plantings of native perennials and grasses.

CITY STAFF RECOMMENDATIONS

- All 4 corners should incorporate consistent, flat pavement with alternative material and/or color contrast (i.e. granite, stamped concrete, alternative concrete pattern) to separate thru pedestrian and bicycle traffic from passive seating areas.
- Utilize planters and pavements outside the main thru area that can be easily and cost-effectively removed or altered to accommodate future development and community identity/ public art elements.
- Provide a custom treatment for each corner with a large, curved planter and edge treatments as illustrated in Concept A.



Figure 3.12 - Corner Enhancement Concept A



Figure 3.13 - Corner Enhancement Concept B



Figure 3.14 - Corner Enhancement Concept C

INTERPRETIVE SPACE WITH ARBOR

City Project Enhancements:

- Dutch corners
- Colored concrete banding and specialty paving
- Trees and perennials
- Pedestrian level and specialty lighting
- Arbor
- Benches
- Electronic projection/kiosk/ artwork

PLAZA AND SEATING

City Project Enhancements:

- Dutch corners
- Colored concrete banding and specialty paving
- Trees and perennials
- Pedestrian level and specialty lighting
- Benches
- Electronic projection/kiosk/ artwork



Figure 3.15 - Corner Enhancement Concept A



Figure 3.16 - Corner Enhancement Concept B

POTENTIAL REDEVELOPMENT

City Project Enhancements:

- Dutch corners
- Colored concrete banding and specialty paving
- Trees and perennials
- Pedestrian level and specialty lighting
- Benches
- Artwork
- Additional Sidewalk



Figure 3.17 - Corner Enhancement Concept C

Brooklyn Boulevard

SOUTHWEST CORNER | ORIENTATION

This corner will serve as a primary point of entry and orientation to the Brooklyn Boulevard district for LRT and bus users, as well as an active cross roads for pedestrians and cyclists moving between the between the LRT station, transit center, shopping centers and neighborhoods.

RECOMMENDATIONS

- The space should reflect these roles by incorporating wayfinding monuments or kiosks, as well as benches, bike racks, and perhaps overstory trees and an arbor to create a human-scaled space that is interesting, comfortable and safe.
- Functional elements such as benches, arbors and kiosks could be designed as art elements that express community and cultural identity.

CITY STAFF RECOMMENDATIONS

- Incorporate planters with irrigation near the curb and extend electrical power to the planting bed.
- Incorporate center planting bed designed to accept a future artwork.
- Seating and bike parking set back in curved landscaped border.

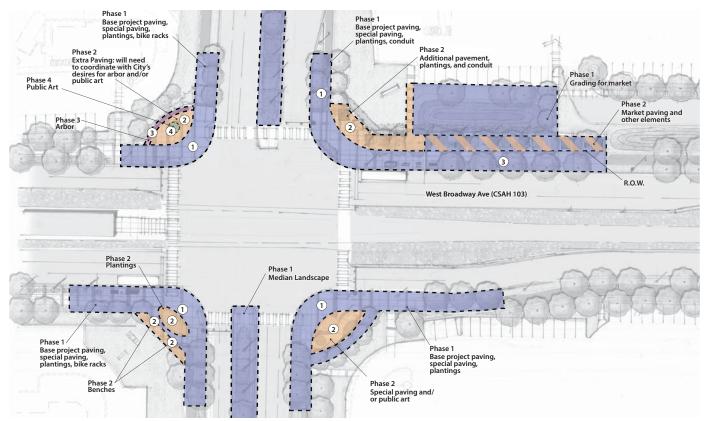


Figure 3.18 - Brooklyn Boulevard Corner Enhancements Phasing Plan



Figure 3.19 - Brooklyn Boulevard Streetscape Enhancements

1

2

3

Phase 1

Phase 2

Phase 3

4 Phase 4

Brooklyn Boulevard

SOUTHEAST CORNER | IDENTITY ELEMENT

This corner will also serve as a primary point of entry and orientation to the Brooklyn Boulevard district for LRT and bus users, as well as a focal point for motorists entering the district from the south. The owner of the Acura dealership expressed a desire to keep this corner somewhat uncluttered to maintain views to the auto displays.

RECOMMENDATIONS

• Include signature vertical elements in the boulevard that identify the station area and surrounding district. This element could be a hierarchy of special lighting columns or monuments that repeat throughout the corridor at key locations.

CITY STAFF RECOMMENDATIONS

- Incorporate planters with irrigation near curb, electrical power available in planting bed
- Incorporate center planting bed designed to accept a future artwork
- Seating and bike parking set back in curved landscaped border.



Figure 3.20 - Specialty Lighting Option, southeast corner - Custom Lighting



Figure 3.21 - Specialty Lighting Option, southeast corner - Columnar Lights

NORTHEAST CORNER | REDEVELOPMENT OPPORTUNITY

The property owners of the Northwinds Center have expressed desire to redevelop the corner. This presents an opportunity to strategically align public and private investments in the corridor to support transit-oriented development (TOD). This could be a catalytic investment in life-cycle housing, commercial development, and public infrastructure that encourages infill development built up to the street, creating a more pedestrian-oriented environment.

- In the short term, keep it simple and include pavement patterns and landscaping that can be easily modified.
- Adopt a TOD overlay ordinance as recommended in the Station Area Plan.
- Work with the developers to illustrate how public investment can catalyze private investment by designing the corner plaza to support commercial uses such as outdoor seating and dining.



Figure 3.22 - Parking Edge with Bollards, northeast corner, facing west



Figure 3.23 - Parking Edge with Bollards, northeast corner, facing east

Brooklyn Boulevard

NORTHWEST CORNER | BRING THE MARKET TO THE STREET

A combination of conditions make this site a great opportunity to work with adjacent property owners to create a multi- purpose community gathering space. The proposed LRT station and bus stop will create an active crossroads for users going to and from businesses, transit facilities and residents. Currently there is a farmer's market held deep into the shopping center parking lot out of sight from passers-by. Large, underutilized setbacks and stormwater facilities could be redesigned for a better and more valuable use. This site is also positioned as the northern introduction into the Brooklyn Boulevard Station Area.

- Work with property owners to redesign the underutilized green setback areas and storm water facilities to accommodate a linear, multi-purpose plaza.
- Move the farmers market and other potential markets to this space so they are more visible, activate the space, and are more accessible to pedestrians walking to and from transit facilities.
- Program community sidewalk sales, festivals, and other events for this space.
- Engage the community in the creation of this space.
- Focus investments on simple, cost effective and impactful elements.
- Facilitate urban prototyping and public art competitions to create exciting, colorful elements that express unique qualities of the station area, community, and culture.
- Make this effort a reality by opening day of the BLRT.



Figure 3.25 - Northwest Corner Base Streetscape

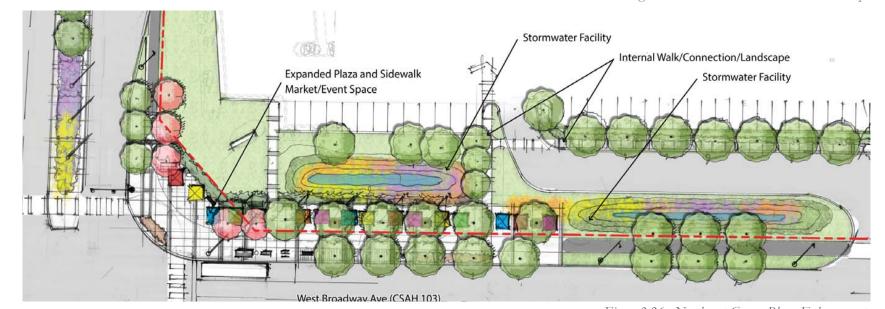


Figure 3.26 - Northwest Corner Plaza Enhancements



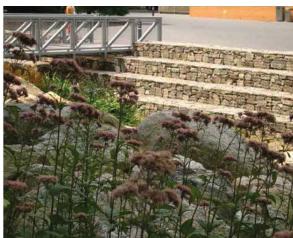
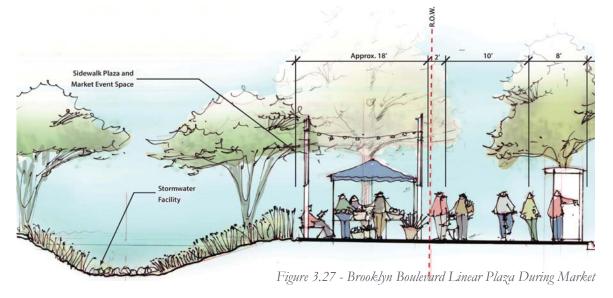


Figure 3.24 - Stormwater Examples



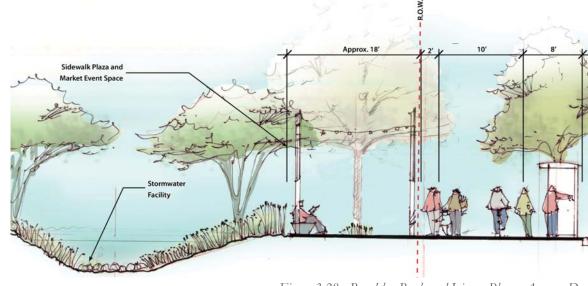


Figure 3.28 - Brooklyn Boulevard Linear Plaza, Average Day

Brooklyn Boulevard

PLACEMAKING THROUGH PUBLIC ART AND SPECIALTY LIGHTING

One of Brooklyn Parks' strengths is its cultural diversity. Great opportunities for community building can be attained by involving members of the community in projects that tap into local talent to design public art elements that express cultural diversity and community identity. The primary streetscape treatment recommended in this document will provide continuity throughout the West Broadway Corridor. However, it is the unique components that express the community identity at each major intersection that will add the most interest, animation and memorable elements to the street.

Public Art competitions and urban prototyping events can leverage regional talent and generate community involvement and excitement for the project. This approach could be utilized to create a layer of unique, flexible, functional, and artfully designed elements. These may be used in corner plazas and include arbors, benches, district markers, and bus shelters. These elements could be developed relatively inexpensively and as temporary fixtures that change as the corridor evolves.











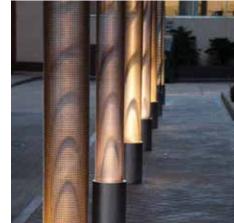


















Figure 3.29 - Placemaking and Specialty Lighting Examples

Brooklyn Boulevard

PLACEMAKING THROUGH PUBLIC ART AND SPECIALTY LIGHTING



Figure 3.30 - Arbor that expresses components of Brooklyn Park's history to strengthen community identity



Figure 3.31 - Electronically projected images integrated with arbor

Brooklyn Boulevard

SHINGLE CREEK

The Shingle Creek Corridor offers a beautiful natural amenity and connection to existing and proposed regional trails. The culverts and existing trail connections will be reconstructed to accommodate widening of the street for the rail corridor. This reconstruction process creates an opportunity to celebrate and improve visual and physical access to this natural amenity.

Currently, the trail system ends on the east side of West Broadway Avenue. The City's park and recreation plan indicates a trail is proposed on the west side of the Creek as well. However, users will only be able to cross West Broadway at controlled intersections north (at North College Park Drive) and south (at Candlewood Drive).

- Include an overlook on both the east and west sides of West Broadway. The overlook can be built over the ends of the culvert and provide a view directly into the creek corridor. The overlooks will also provide a rest area for pedestrians and cyclists midway between bus and LRT stations.
- Coordinate design options and potential funding participation with the Shingle Creek Watershed District. In addition to the overlook structure, the design options could include interpretive displays of Shingle Creeks' role in the ecology and development of the community, as well as wayfinding and identity monuments that celebrate the creek and direct users to regional trail connections.
- Realign the trail connection on the east side further north away from the creek to minimize flood damage.
- Extend the natural character of the stream corridor into the streetscape by incorporating massings of native trees, shrubs, grasses, and forbes along the stream banks, around the trail head, overlook, and neighboring boulevards.



Figure 3.32 - Shingle Creek Overlook

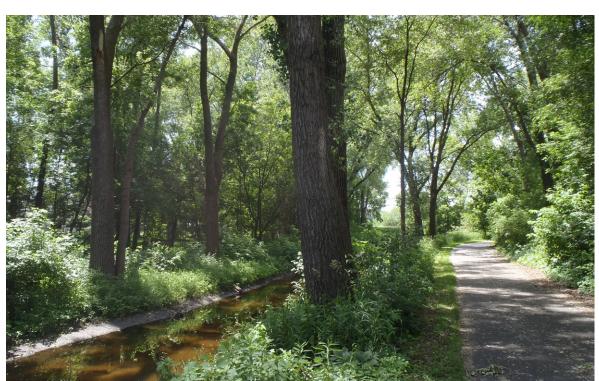


Figure 3.33 - Shingle Creek

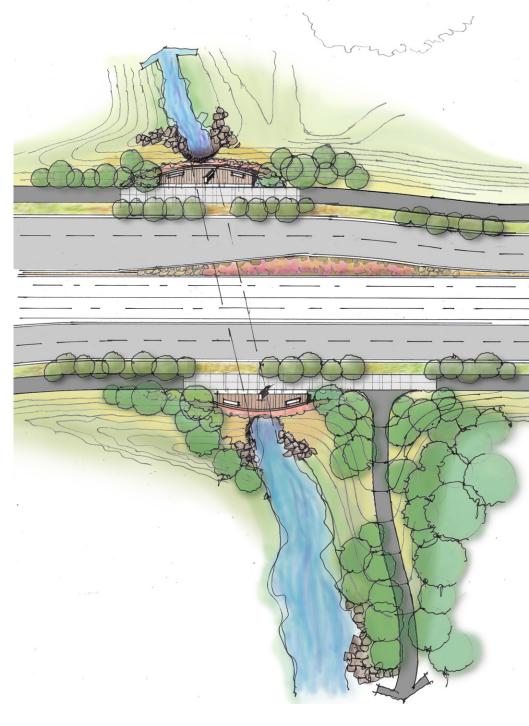


Figure 3.34 - Shingle Creek Overlook

85th Avenue

This segment is defined by Shingle Creek to the south and 89th Avenue to the north. Residential neighborhoods occupy most of the west side and the northeast quadrant. Broadway Square, a small commercial area, occupies the Southwest corner of 85th Avenue. Maplebrook, a residential community, is located in the northwest corner of 85th Avenue. The southeast portion includes the North Hennepin Community College (NHCC) and Hennepin County Library.

STATION AREA PLAN

As described in the Station Area Plan:

"The predominant land use at the 85th Avenue Station is public institutions. North Hennepin Community College (NHCC) occupies most of the eastern half of the Station Area Planning area.

Founded in 1966, NHCC is one of the largest and most diverse community colleges in Minnesota. Over 10,500 students were enrolled in 2015 with a full-year equivalent of over 4,500 students. It is the main driver of heavy ridership projections at the 85th Avenue stop given its student demographics and commuter pattern.

North Hennepin Community College is well along in developing a 20-year Master Facilities Plan to accommodate the College's projected growth and changing needs. Overarching themes include the reorienting of the primary approach to the street, and the construction of a new Center for Fine and Performing Arts. A key part of the plan is to encourage mass transit and ride sharing as part of the broader sustainability goals."



Figure 3.35 - Station Area Plan



Figure 3.36 - Station Area Plan Illustration



Figure 3.37 - Bird's-Eye View: Intersection of West Broadway and 85th Avenue

85th Avenue

The streetscape should support this area as a cultural hub and community focal point, and blend with the progressive, modern architecture of the new Hennepin County Library and the Bioscience Building. The streetscape and station should express the arts & education quality of the area and its civic character.

STREETSCAPE DESIGN OBJECTIVES

- Integrate the streetscape at the northeast corner of the intersection with the future Fine and Performing Arts Education Center which will be organized around a community fine arts plaza and the New Hennepin County Library.
- Improve the 85th Avenue Streetscape as a gateway to the district and a pedestrian and bicycling connection between Maplebrook and other surrounding neighborhoods to cultural facilities, bus stops and the BLRT Station.
- Improve the west edge of the corridor by providing space between the multi-use trail and the future reconfigured NHCC parking lot to accommodate snow storage, a landscaped buffer, and replace vegetation lost to the widened street.
- Anticipate future redevelopment of Broadway Square into a mixeduse building fronting on the sidewalk.
- Define connections between the LRT Station, multi-use trail along West Broadway Avenue to a new pedestrian and bicycle entry to the campus.
- The bus stop adjacent to NHCC will see heavy pedestrian traffic as both bus and light rail users will enter the campus from this location. Accommodate the anticipated increase in pedestrian and bicycling activity following the opening of the BLRT lines and mixed-use trails.







Figure 3.39 - NHCC Art



Figure 3.40 - Hennepin County Library



Figure 3.41 - Hennepin County Library Bike Rack



Figure 3.42 - Bioscience Building Art - NHCC

85th Avenue

85TH AVENUE STATION

The station design is inspired by the nearby civic and academic facilities, which include North Hennepin Community College and the new Hennepin County Public Library. The 85th Avenue station design represents the metropolitan connections that Blue Line Light Rail Extension brings to Brooklyn Park with specific reference to the adjacent college campus and community library. The design of the station complements its surroundings but is distinct in form and color. Character and Context Workshop descriptions include: Campus, Destination, Learning, Entrance to the Future, and Pedestrian Facilities. Additional design attributes include:

- Primary access is at the 85th Avenue intersection which is signalized. The intersection is redesigned to shorten and improve pedestrian crossings. A pedestrianactivated crossing signal facilitates pedestrian access to the south end of the platform across West Broadway Avenue.
- On-street bus stops are located at the 85th Avenue intersection and near the south platform access point to facilitate convenient transfers to LRT.
- Bike parking areas are provided at the southeast corner of the 85th Avenue intersection and near the south platform access point near the college.
- Other BLRT Project area improvements will include:
 - Pedestrian-crossing deterrent barriers on both sides of station platform mid-block to guide pedestrians to safer crossing areas
 - Lighting



Figure 3.43 - Preliminary Station and Platform Design



Figure 3.44 - Character and Context Workshop Descriptions



Figure 3.45 - Illustration of Railing at Broadway Square

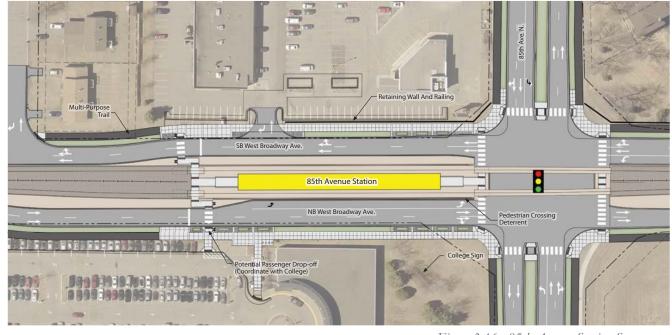


Figure 3.46 - 85th Avenue Station Streetscape

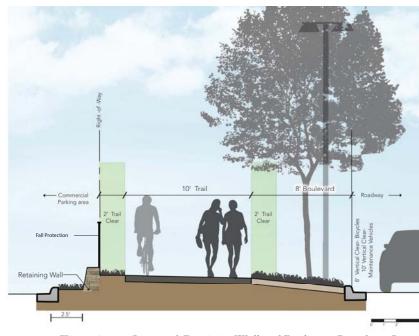


Figure 3.47 - Section of Retaining Wall and Railing at Broadway Square

85th Avenue

RECOMMENDATIONS

• Incorporate Buffer Parking. NHCC is exploring ways to redesign their parking lot to be more efficient, improve circulation, and to accommodate the new entry point on West Broadway Avenue. At the time of this writing, alternative concepts are being explored that incorporate one-way traffic flow, two-way traffic flow, angled parking, and 90-degree parking. All the concepts will maintain an adequate space between the proposed ROW and the parking lot curb to incorporate a landscaped parking lot buffer to account for losing the required 15 foot setback. The buffer design should accommodate a reduced area and snow storage needs by utilizing overstory trees, native perennial grasses and shrubs that can handle snow piling and bumper overhangs. See Figure 3.48 and Figure 3.49.

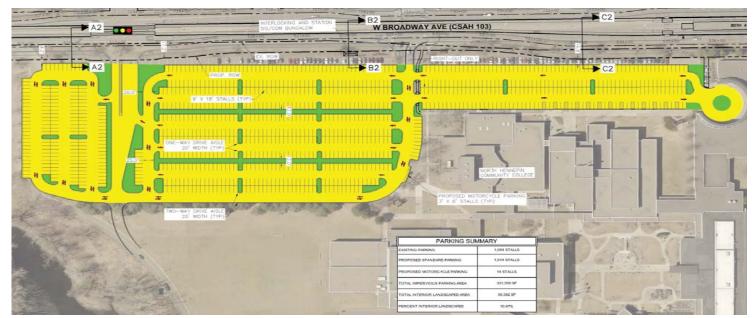


Figure 3.48 - 90 Degree One-way Parking Option

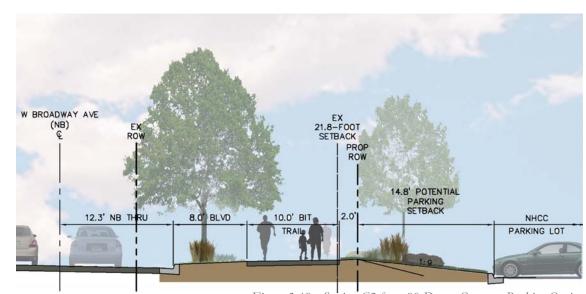


Figure 3.49 - Section C2 from 90 Degree One-way Parking Option



Figure 3.50 - Bus Stop at NHCC



Figure 3.51 - Buffered Parking at NHCC

85th Avenue

- Design the streetscape at the southeast corner of 85th and West Broadway Avenue to accommodate a potential linear plaza as a welcoming front yard to the NHCC Campus and an outdoor studying and gathering area. The plaza could be a temporary installation that anticipates reconstruction of a new Center for Student Services at the southeast corner of West Broadway and 85th Avenue. See Figure 3.53.
- Incorporate pervious pavement in the boulevards near the corners, bus stops, and BLRT access points to provide a more walkable surface for the anticipated high volumes of pedestrians and bicyclists; provide visual cues to direct users safely through bus stops and safe crossings; as well as accommodate stormwater infiltration.
- Collaborate with NHCC to balance an appropriate amount of bicycle racks and storage facilities associated with BLRT and Campus Expansion.
- Incorporate pedestrian level lighting, residential fencing, and seating nodes throughout this segment as recommended in the associated chapters of this document.

- 1 Phase 1
- 2 Phase 2: College Improvements

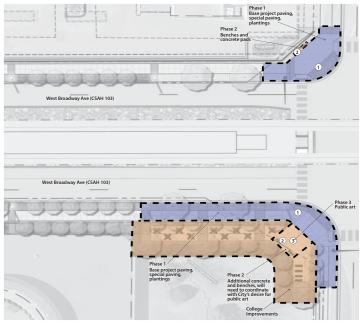


Figure 3.52 - 85th Avenue Corner Enhancements Phasing Plan

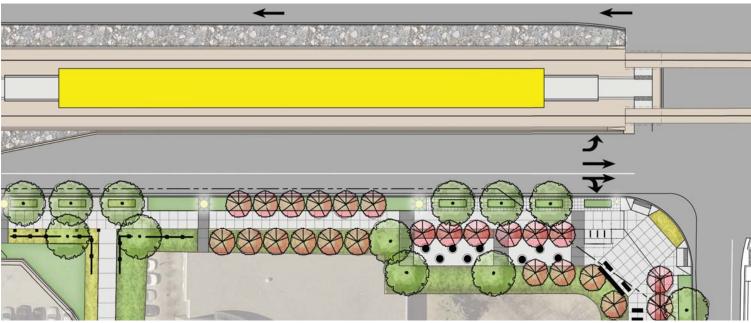


Figure 3.53 - Corner Enhancements at Intersection of West Broadway Avenue and 85th Avenue



Figure 3.54 - Plaza and Art Examples



Figure 3.55 - Linear Plaza at NHCC



Figure 3.56 - Corner of West Broadway Avenue and 85th Avenue

85th Avenue

- Encourage walking and biking from the Maplebrook residential area and other surrounding neighborhoods to cultural facilities, bus stops and the BLRT Station. This can be accomplished by adding multi-use trails, lighting, street trees and landscaped medians to 85th Avenue
- Design the streetscape at the northeast corner of the intersection to accommodate the future community fine arts plaza. It will become the center piece for the potential Center for Fine and Performing Arts and the new Hennepin County Library.
- Throughout the NHCC campus and library campus are sculptures that reinforce this district as a "Cultural Hub". This tradition could grow by incorporating sculptures or other forms of public art at the southeast and/or northeast corners of 85th Avenue. A public arts competition could be considered as a community building effort that leverages local talent and the college arts department.



Figure 3.57 - Maplebrook Enhancements



Figure 3.58 - West Broadway Avenue Streetscape at 85th Avenue



Figure 3.59 - Pedestrian Node at Maplebrook



Figure 3.60 - Pervious Pavement in Boulevard



Figure 3.61 - 85th Avenue Plan



Figure 3.62 - Hennepin County Library Plaza Space



Figure 3.63 - Placemaking Examples

93rd Avenue

This district is defined by 89th Avenue to the south and Hwy 610 to the north. It is characterized as a main employment center with a business center as the dominant use. The 93rd Avenue Station will benefit existing and future employment uses. Transit ridership in this area is more by choice and lifestyle than necessity.

A low-density residential neighborhood occupies the southeast quadrant. Ebenezer Church recently built a new building at the southeast corner of the 93rd Avenue intersection adjacent to the proposed LRT Station. At the time of this writing, two hotels have been proposed at the southeast corner of the Hwy 610 interchange. The LRT station and associated improvements will attract transit users and provide opportunities to enhanced pedestrian/bike connections to surrounding business centers, Oak Grove, neighborhoods and potential new development.

STATION AREA PLAN

As described in the Station Area Plan:

"The employment center at 93rd Avenue is largely built out with a mix of light industrial, office, and research/development uses and most of the remaining vacant sites have approved development plans. However, this area was planned before access to LRT became a consideration. Both property and business owners expressed their enthusiasm for the Bottineau LRT. They see the 93rd Avenue Station as a way to attract many more potential employees from the region that would otherwise not have a practical way to get to work in Brooklyn Park. Increased transit options will decrease the required parking ratios for uses within a half-mile walk of the LRT platform.

The City of Brooklyn Park would like to see land owners think about amending their development plans to consider a wider range of uses (such as a hotel) and the creation of even more jobs. To this end, the City will consider zoning incentivizes to encourage property owners to leverage the proximity to light rail transit

Improved Pedestrian Connections

The main challenge for people walking and biking within this Station Area is a lack of existing sidewalks and convenient connections. Much can be done to improve the walking/biking experience. As was noted in the Transportation Networks section, a 10-foot multiuse trail should be constructed along both sides of 93rd Avenue between Highway 169 and Zane Avenue. This link will act as a pedestrian/bike main street that connects transit, employment, and retail (to the east)."

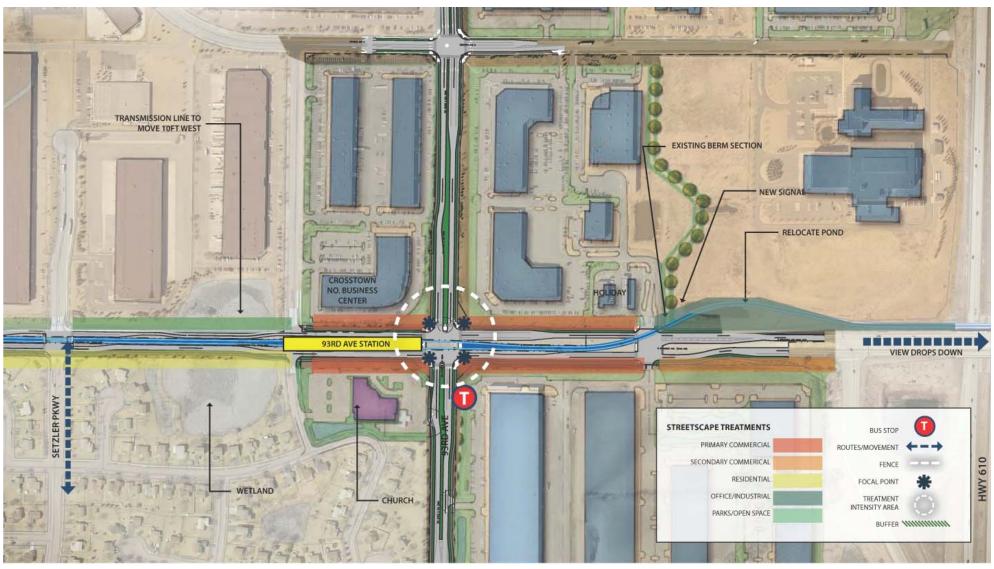


Figure 3.64 - Design Objectives

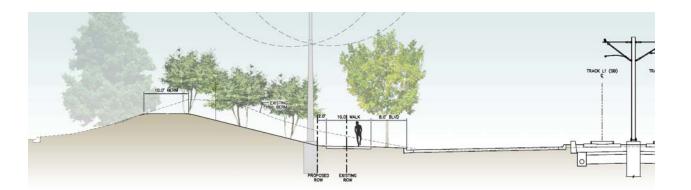
93rd Avenue

All four corners of the 93rd Avenue intersection have generous triangular right-of-ways. They provide opportunities to create pedestrian oriented spaces and to incorporate public art and other elements which will improve this area as a gateway to the corridor from Highway 610 and strengthen its identity as a center of employment and innovation.

As part of the LRT improvements, a stormwater infiltration area is proposed at the southwest corner of the 93rd Avenue intersection. 93rd Avenue will also be reconstructed between Xylon Avenue to the west, and Louisiana Avenue to the east and will include a median, 10 foot mixed use trails, and boulevards on both sides. Winnetka Avenue will also be reconstructed approximately 430 foot north and south of 93rd Avenue. Bus Stops will also be located at the southwest and northeast corners of the 93rd Avenue and West Broadway intersection.

Overhead electrical transmission lines run parallel to West Broadway Avenue for most of the length of this segment. The transmission line poles will be moved west to accommodate widening of West Broadway Avenue. Existing berms and landscaping will need to be significantly altered to accommodate this work. The mature height of any remaining and proposed tree that fall within the new alignment of the transmission lines should be limited to approximately 18 feet.

The landscape character of this segment is more open and dominated by berms intended to screen the industrial buildings. Wetlands exist on the east and west of West Broadway Avenue, south of 92nd Avenue. At the north end, the barren freeway landscape across the Hwy 610 bridge creates a visual and psychological disconnection between Oak Grove Parkway and the rest of West Broadway Avenue to the south.



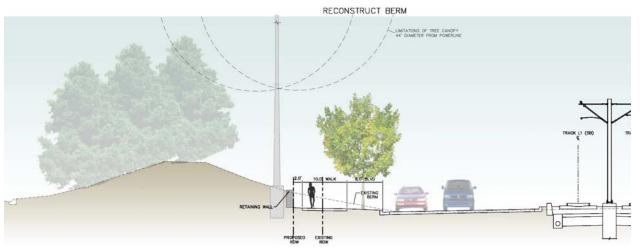


Figure 3.65 - Reconstructing existing berms vs retaining wall adjacent to power lines







Figure 3.66 - 93rd Avenue Existing Conditions

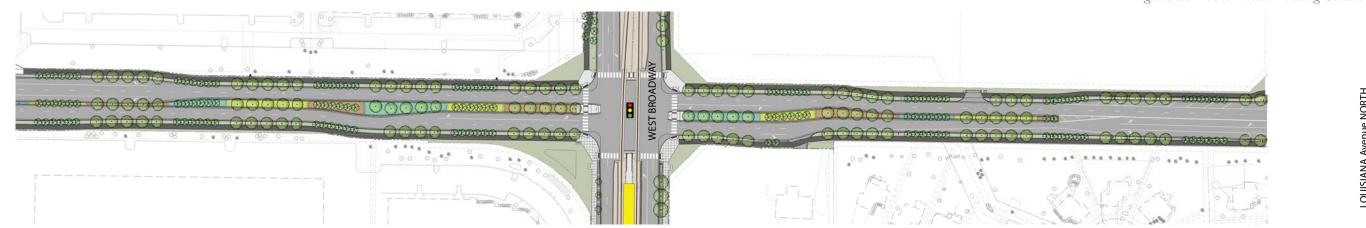


Figure 3.67 - 93rd Avenue

93rd Avenue

93RD AVENUE STATION

The 93rd Avenue station will be a sister station to the 85th Avenue station. It will be at a crossroads that will continue to see high tech development and it is distinct in form. Character and Context Workshop descriptions include: Employment Destination, Innovation, Connections Needed, Lifestyle, and Distance. The station design interprets local innovative industries. Additional proposed design attributes include:

- Primary access at the 93rd Avenue intersection, which is signalized. The intersection will be redesigned to shorten and improve pedestrian crossings. A pedestrian-activated crossing signal will facilitate pedestrian access to the south end of the platform across West Broadway Avenue at 92nd Avenue.
- On-street bus stops at the 93rd Avenue intersection to facilitate convenient transfers to LRT.
- Bike parking areas at the southwest and southeast corners of the 93rd Avenue intersection.
- Other BLRT Project area improvements will include:
 - Pedestrian-crossing deterrent barriers on both sides of station platform mid-block to guide pedestrians to safer crossing areas
 - Station Area Lighting



Figure 3.68 - Character and Context Workshop Descriptions

Figure 3.69 - Station Area Plan, Base Streetscape



Incorporate public art and/or other elements that will strengthen its identity as a center of employment and innovation.

gateway to the corridor from Highway 610.

• Include seating opportunities, bus connections, and bike parking.



Figure 3.70 - Preliminary Station and Platform Design

93rd Avenue

- Southwest Corner of 93rd Avenue Enhance Proposed Stormwater Infiltration Area. This corner acts as a crossroads between employment centers to the west and the BLRT station. A stormwater infiltration area is proposed in front of the existing monument sign for the adjacent business park. The landscape treatment of the infiltration area should be low and colorful to enhance the view to the sign and this area as a gateway. Benches and wider walks are also recommended to improve this corner as a bus stop and pocket park for employees and other users.
- Southwest Corner of 93rd Avenue Provide Pocket Park and Connection to Ebenezer Church. This corner serves as a primary access point to the BLRT station and crossroads to businesses and neighborhoods. It is also a primary access point to the Ebenezer Church for people arriving by the LRT. This corner should include a walk to the church and potentially benches for church goers or people waiting for a bus or train.

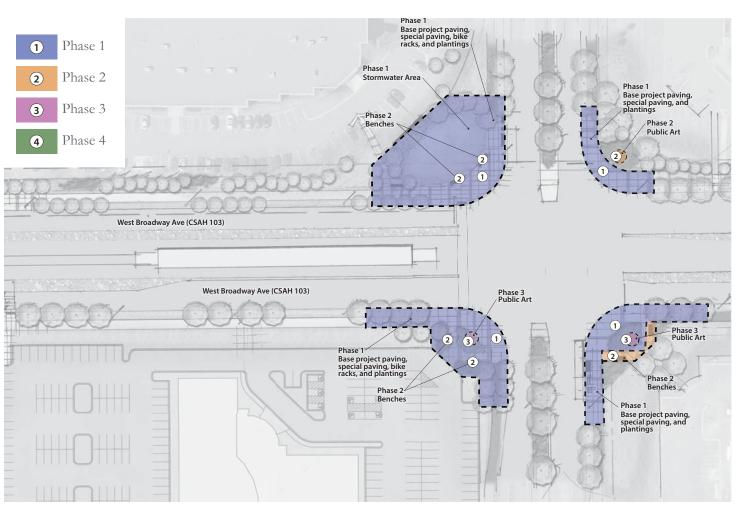


Figure 3.71 - 93rd Avenue Corner Enhancements Phasing Plan

- Incorporate Public Art at the Northwest and/or Northeast Corners of 93rd Avenue. A sculpture or other identity element that expresses this district as a center of employment and innovation could be added to either of these corners. The northwest corner may be the strongest location because the identity element will bolster this area as a gateway to the corridor for Highway 610.
- 93rd Avenue Extend Streetscape Treatment. Street trees, median plantings and pedestrian level lighting should be extended along 93rd Avenue to improve the walking and biking experience, as well as enhance this corridor as a link connecting transit, employment, and retail.
- Incorporate an East/West Sidewalk in Proximity to the Gas Station. As illustrated in the Station Area Plan, room exists for this facility around the perimeter of the existing detention ponds.
- Incorporate Large Massings of Understory Trees, Shrubs. and Native Perennials. Large massings of low to midlevel trees are recommended within the transmission line easement to offset the loss of existing berms and trees lost by the realignment of the transmission lines.

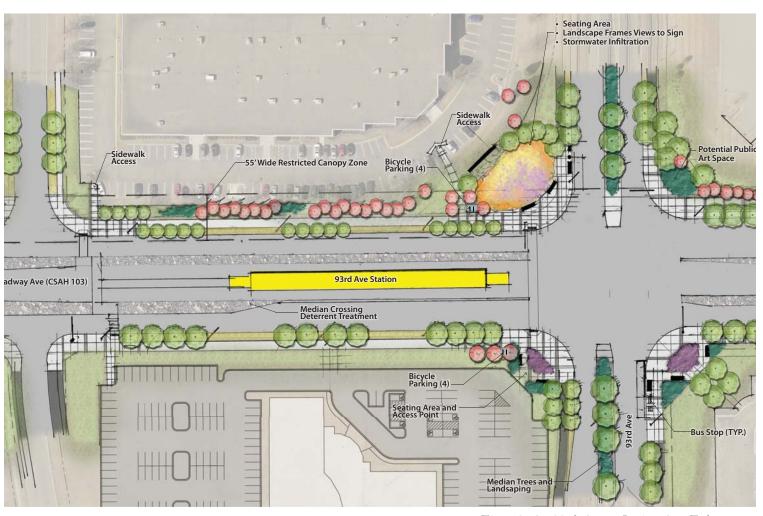


Figure 3.72 - 93rd Avenue Station Area Enhancements

Streets North of Highway 610

STATION AREA PLAN

The Oak Grove Station Area is the largest development site along the Bottineau LRT and one of the most promising development opportunities in the region.

The Highway 610 interchange provides easy ingress/egress for commuters to the district and the proposed park-and-ride facility planned for this station. The interchange acts as a gateway to the district, and as a barrier that visually and psychologically separates Oak Grove from the other districts along West Broadway to the south.

The West Broadway Streetscape Framework focuses on the streets within the overall Oak Grove street network that will be built as part of the initial construction of the BLRT project. The streets include:

- West Broadway Avenue (which includes the Grand Boulevard) from Highway 610 to Winnetka Avenue
- Oak Grove Parkway from the Target Campus to Xylon Avenue
- 99th Avenue and Rhode Island Avenue fronting the proposed park and ride

As stated in the Station Area Plan:

"A substantially enhanced street network is required to meet future traffic projections and support planned development for the area. The main armatures of this network will be a reconfigured West Broadway Avenue and Oak Grove Parkway.

West Broadway will be converted from a rural two-lane street to a beautifully landscaped four-lane boulevard, creating a memorable arrival point when coming over the Highway 610 bridge. The boulevard design allows the transmission line to run up the center of the median where its visual presence can be significantly diminished." See figure ----

Oak Grove Parkway will be partially realigned to allow for a full movement signalized intersection at West Broadway and Main Street, an attribute that is critical for the anticipated commercial mix. Segments of the loop include Target Parkway, Winnetka Avenue, and 99th Avenue. A loose grid of City streets will then be used to subdivide the remaining superblocks.

"Target's vision for Oak Grove is to develop a signature mixed-use district that is anchored by corporate office uses and supported by a retail main street, housing, parks, trails, and the LRT station. Its plan calls for continuing to build out its Northern Campus north of Oak Grove Parkway between the existing towers and the Rush Creek Regional Trail."

"The City is exploring a feature event park on their land adjacent to the OMF site. This would be a synergistic use given the plans for compact development in the balance of the Station Area. The park is envisioned to be a one-of-a-kind regional destination that would create an additional amenity at Oak Grove Park that could be accessed by foot/bike, LRT, or motor vehicle. A TOD Overlay is recommended for Target's property at Oak Grove."



Figure 3.73 - Grand Boulevard Central Median

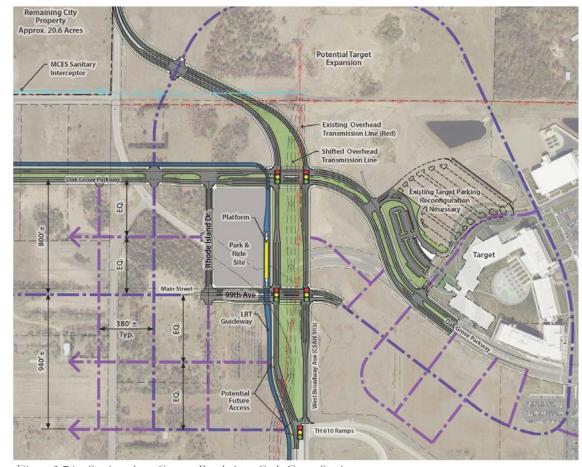


Figure 3.74 - Station Area Concept Rendering - Oak Grove Station

Streets North of Highway 610

CROSS STREETS

OAK GROVE PARKWAY EAST AND WEST

The streetscape treatment along Oak Grove Parkway evolves from the manicured look of the corporate entrance to Target east of West Broadway to a more natural treatment through the west side to Xylon Avenue. Median plantings will continue to the west on Oak Grove Parkway and stop at Xylon Avenue.

RHODE ISLAND AND 99TH AVENUES

These two streets will be treated as secondary urban sidewalks providing safe and comfortable connections between the surrounding development and the BLRT Station. The streetscape will include simple boulevard treatments with lights, street trees, benches, trash receptacles and concrete sidewalks



Figure 3.75 - Rhode Island Avenue and 99th Avenue Base

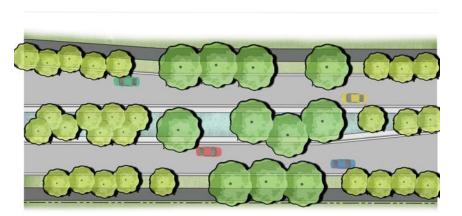


Figure 3.76 - Natural Median Treatment Plan

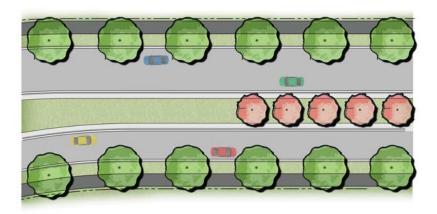


Figure 3.77 - Corporate Median Treatment Plan

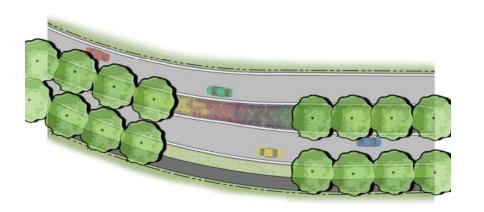


Figure 3.78 - Urban Median Treatment Plan



Figure 3.79 - Natural Median Treatment Example



Figure 3.80 - Corporate Median Treatment Example



Figure 3.81 - Urban Median Treatment Example

Streets North of Highway 610

DESIGN CHARACTER-WHAT WE HEARD

- People centered, inviting, warm, active
- Place to be, "Huburb"
- Modern, contemporary, nature, green, parks (Rush Creek Trail), edge of development
- Urban grand place
- City center

GRAND BOULEVARD PLACEMAKING-**CENTRAL OPEN SPACE AMENITY**

There will be several positive forces acting on the Grand Boulevard, particularly the central median that could offer ingredients to create an open space amenity to attract and retain businesses and residents. These forces include:

- A hierarchy of open spaces is planned within the Oak Grove district that includes a future signature regional park adjacent to the OMF, a potential plaza at the east end of the proposed main street near Target, greenway linkages associated with the future stormwater system to the west, and a network of sidewalks and trails that converge at the Grand Boulevard.
- A potential large influx of residents, workers, and visitors associated with future development and the BLRT
- An estimated 30,000 vehicles per day passing by on West Broadway Avenue offering great visibility to this area and adjacent businesses
- An LRT station fronting the west side bringing a steady stream of users
- Its position as the gateway to the district and central cross roads for the east and west sides
- Stormwater from a majority of the district flows through this area and could be utilized as a water resource for placemaking

PRIMARY DESIGN OBJECTIVES FOR GRAND **BOULEVARD STREETSCAPE**

- Treat as a gateway to the Oak Grove District and Target Headquarters.
- Express the natural landscape by utilizing prairie and woodland treatments on the north and south fringes. The landscape should evolve to more refined treatments within the central median and the corporate entrance to Target along Oak Grove Parkway.
- Utilize stormwater as an amenity through low impact green infrastructure practices.

BASE STREETSCAPE TREATMENT

Figure 3.83 illustrates the base streetscape project to be built with the BLRT and street reconstruction project. The base project includes:

- Concrete pavement for all corners
- Concrete pavement for mixed use trails on the block with the station platform.
- Bituminous pavement for the trails outside of the station
- Turf for boulevards and landscape areas between the street curb and right-of-way
- Roadway intersection lighting
- Stormwater treatments
- Bike Racks

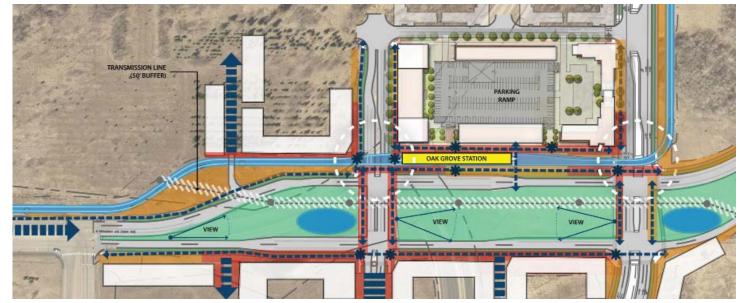


Figure 3.82 - Design Objectives

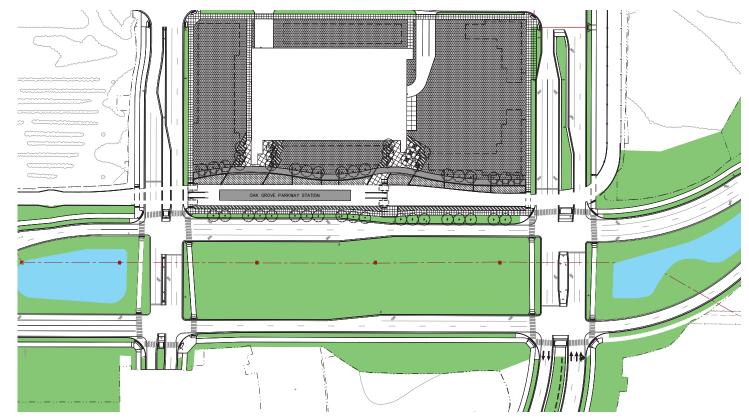


Figure 3.83 - Base Streetscape Treatment

Streets North of Highway 610

SOUTH MEDIAN RECOMMENDATIONS

This median serves as the primary entrance to the district and as a stormwater infiltration area.

- In the short term, the landscape treatment should express the native plant communities by utilizing masses of prairie grasses and forbes, as well as large groupings of trees strategically placed to frame the entry, compliment the stormwater infiltration area and buffer views to power lines.
- Mid to long term improvements should consider incorporating signature vertical elements such as, monuments, sculpture or specialty lighting at the south end to strengthen the identity of Oak Grove as a unique place.

CENTRAL MEDIAN RECOMMENDATIONS

- Design short term improvements to accommodate, not inhibit, long term placemaking initiatives. As the Oak Grove area evolves and infills with businesses, residents, workers and visitors, the demand for a signature central urban open space may grow. There is also potential to attract a master developer for a large portion of Oak Grove that may want to invest in an iconic open space that becomes the central gathering area for the development.
- Create a flexible open space to accommodate a variety of daily and year round uses and provides an amenity to attract and retain business and residents to the area.
- Incorporate an urban stormwater amenity at the north end of the central median. Approximately 25%-35% of the northeast corner of the center boulevard area should be used for an open stormwater amenity that is more urban in character with defined edges, groves of trees and seating areas.
- Offset powerlines to the west. As mentioned, one of the objectives for the central median of the Grand Boulevard is to ensure that short term improvements will not impede long term improvements. By offsetting the powerlines to the west a more flexible central contiguous open space can be created less unencumbered by the site and buzz of the powerlines than if the lines are centrally located. The visual presence of the poles can still be minimized through large canopy boulevard trees and massings of lower story trees

- within the easement under the lines. Improvements to the space can be more heavily weighted to the east side.
- Reduce the number of power line poles in the central median. The number of power line poles in the central median can be reduced to 2, rather than 3 as indicated in previous concepts. This can be accomplished by adjusting the pole spacing within acceptable ranges north and south of the central boulevard. The presence of the power lines in the central boulevard will also be reduced by minimizing the number of poles.
- Emphasize east/west pedestrian linkages and linear plazas- the primary pedestrian linkages between the west and east sides of the Grand Boulevard occur at the north and south ends of the central space. The south end is anticipated to be the primary connection between west side developments, the BLRT station and the future Main Street and Target Campus to the east. These connections should be emphasized through the streetscape design by focusing more investment in wider walks, lighting, benches, plant materials and higher quality paving than is offered in the base treatment.
- Focus placemaking improvements in the southeast corner. The southeast corner of the central median will be the most active crossing point to the future Main Street and core of the Oak Grove District. This corner is also the most visible for visitors entering the district from the south on West Broadway and accessible for future patrons, employees and residents to the east to a large open space amenity.

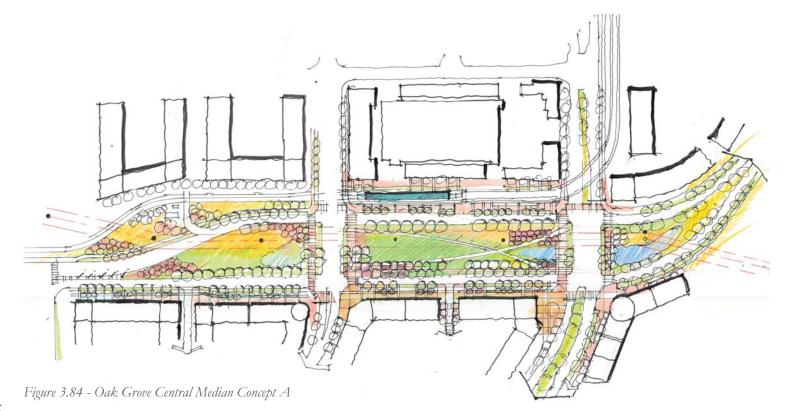




Figure 3.85 - Rendering showing importance of moving power lines away from center

Streets North of Highway 610

CENTRAL MEDIAN CONCEPTS

Four concepts were created that explore a variety of treatments for the central median while addressing the primary design objectives.

Concept A: This concept is similar to the illustration prepared by UDA in the Station Area Plan with a simple criss-crossing sidewalk and pastoral landscape pattern. This plan differs by offsetting the powerline to the west, opening a central area for a great lawn and a stormwater infiltration area to the north. A more pastoral treatment of the landscape with groupings of trees and ground layer plant materials could also be utilized to help minimize the presence of the power poles as suggested in the Station Area Plan. The plan illustrates incorporating a tree lined promenade on the east side with multi-purpose spaces at the southeast corner. These spaces will act as an extension of Main Street offering seating coves and a setting for outdoor markets, festivals or other programmed events similar to the sidewalk market/linear plaza suggested at Brooklyn Boulevard.

Concept B: This concept is the most simplified and illustrates the least investment recommended in the short term. The plan includes a double row of boulevard trees to the east and a single row to the west with lawn in between. Pedestrian level lights would also be included along the street edges.

Concept C: This concept illustrates a more developed long term iconic urban park that becomes the central gathering area for the Oak Grove district. As mentioned, in the long term when the Oak Grove area evolves and fills with businesses, residents, workers and visitors the demand for a signature central urban open space may grow. This concept incorporates a more urbanized central water feature, a small plaza, and performance/market space on the south end, a tree lined promenade with seating coves on the east side, expanded walks on the north and south ends with sculptural wayfinding monuments at the corners, and storm water infiltration areas on the west side under the power lines.

Concept D: This concept is similar to Concept A with a simple crisscrossing sidewalk and stormwater amenity to the north. This plan differs by shifting the crisscrossing sidewalks to the east away from the powerlines. The paths also intersect at a small sculpture court. Approximately 25%-35% of the north area incorporates an open stormwater amenity that is more urban in character with defined edges, groves of trees and seating areas. This plan also includes a tree lined promenade on the east side with multi-purpose spaces at the southeast corner.

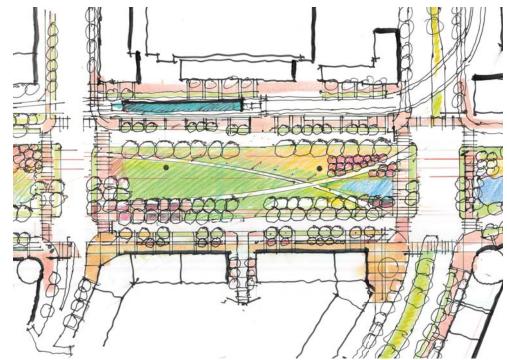
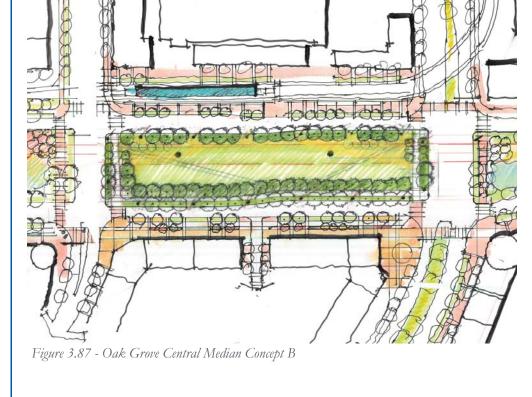


Figure 3.86 - Oak Grove Central Median Concept A



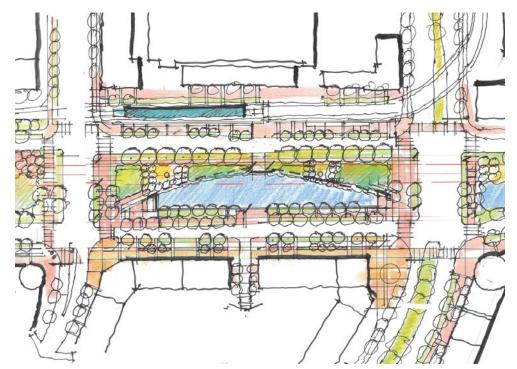


Figure 3.88 - Oak Grove Central Median Concept C



Figure 3.89 - Oak Grove Central Median Concept D

Streets North of Highway 610

OAK GROVE PARKWAY STATION

Located at the northern limits of Brooklyn Park, the station will serve nearby employment destinations and future development areas through walk-up access, as well as other more distant commuters with park and ride facilities. Character and Context Workshop descriptions include: Beginning of the Line, "Huburb", Signature Area, Urban, Green, Modern, Wayfinding, and Community History. The station and park-and-ride structure will be one of the first structures built within a larger, town-center masterplan. Their design is articulated to a level that is compatible with the future development and with materials and finishes that evoke individuality and lasting quality. Additional design attributes include:

- The station and parking structure are designed to support the emerging development patterns north of Hwy 610.
- New streets are planned around the station site, and the parking structure is sited to accommodate potential future transit-oriented development nearby.
- The parking structure is accessed via two entrances from Rhode Island Dr. on the west side. It is four levels plus the ground level, accommodating 900 + parking spaces. It has stair/elevator buildings at each corner of the east facade facilitating convenient pedestrian connections to the platform.
- The station platform is located on the west side of West Broadway Avenue. Primary access is at the 99th Avenue intersection. Pedestrians can also access the station on the north side with a short walk from the Oak Grove Pkwy intersection.
- A pedestrian-only area is planned for the space between the parking structure and the station platform with seating areas and landscaping.
- A secured bike parking area for approximately 20 bicycles is created inside the parking structure near the northeast corner.
- A short-term passenger drop-off and pick-up area is located inside the parking structure on the ground level along the east edge.

Other BLRT Project area improvements will include:

- Pedestrian crossing deterrent fencing on both sides of the station platform mid-block
- Station area lighting



Figure 3.90 - Preliminary Station and Platform Design



TATION DESIGN CONCEPTS

Figure 3.91 - Character and Context Workshop Description

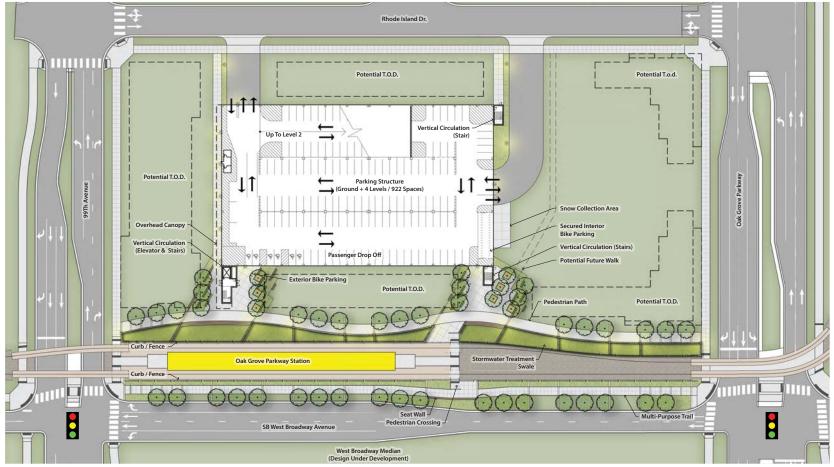


Figure 3.92 - Station Area Plan

Streets North of Highway 610

EAST SIDE MIXED USE TRAIL AND STREETSCAPE RECOMMENDATIONS

The station area plan by UDA illustrates an urban boulevard treatment with street trees and wide walks with a flexible amenity space at the base of multiple story mixed use buildings. The building edges vary from 20 to 30 feet back from the street curb shaping a strong active edge to the Grand Boulevard.

- Short term: The base project includes an 8 foot boulevard with a 10 foot bituminous mixed use trail with concrete corners. The right-of-way is 2 feet from the east edge of the trail. This configuration will provide a mixed-use trail that is separated from the future primary walk and streetscape envisioned in the Station Area plan.
- Long term: The design of primary walk and multi-use trail could be more integrated through the use of similar but contrasting materials and creative treatments of the buffer strip between the two uses.

CITY STAFF RECOMMENDATIONS

- Concept A is preferred by the City Staff. Use the north and south tips for stormwater treatment using a variety of BMP's and approximately 25%-35% of the area in the northeast corner of the center boulevard area for stormwater BMP.
- Regarding a sidewalk on the east side of the center boulevard area, the City would prefer
 that the area be graded for a future sidewalk but does not want a sidewalk installed in the
 short term. The County and City Engineering staff have safety concerns about mid-block
 crossings and wants to wait and see on installation of a side walk at a future time.
- North Median: The role of this median as the northern gateway to the core station area should be expressed through the streetscape treatment. This median also serves as a stormwater infiltration area. In the short term, the landscape treatment should express the native plant communities by utilizing masses of prairie grasses and forbes, as well as large groupings of trees strategically placed to frame the entry, complement the stormwater infiltration area and buffer views to powerlines.
- Mid to long term improvements: should consider incorporating signature vertical elements such
 as monuments, sculptures, or specialty lighting at the north end to strengthen the identity
 of Oak Grove as a unique place.
- Lighting along West Broadway Avenue to Winnetka Avenue: At Oak Grove Parkway, the City's preference would be for lighting to be installed to future Sumter Avenue with installation of conduit all the way to Xylon Avenue with lighting at the intersection.



Figure 3.93 - Rendering of East Side Mixed Trail and Streetscape Plan, Kimley-Horn



Figure 3.94 - Rendering of East Side Mixed Trail and Streetscape Section, Kimley-Horn

Streets North of Highway 610

PLACEMAKING EXAMPLES

Stormwater Management-Example



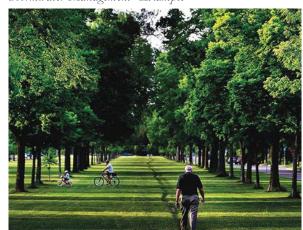
Stormwater Management- Example



Corporate Boulevard Treatment Example



Stormwater Management- Example



Park Feeling Example



Natural Treatment Example



Stormwater Management-Example



Gold Medal Park- Example



Moonglow Parade-Example



Figure 3.95 - Placemaking Examples

Stormwater Management-Example



Ice Sculpture-Example



Rice Park-Example

The quality, function and scale of the streetscape elements have a great deal to do with shaping the character of the West Broadway Corridor. As mentioned previously, visual preference surveys were conducted during property owners meetings, a community workshop, and open houses as well as with the Design Resolution Team (DRT) to define the preferences for the character of the West Broadway streetscape components. The family of components representing a more timeless to contemporary style garnered the most votes from the participants. The intent of this chapter is to provide examples of streetscape elements that:

- represent the community preferences and aid in forming the final palette,
- withstand the snow, salt, sandblasting from snow plows, vandalism, and other urban conditions through functional and simple design
- contribute to a sense of safety and comfort to promote walking and biking, and
- provide an armature for layers of change and activity and are flexible to adapt to a variety of site conditions

The most visual impact will be achieved by emphasizing vertical streetscape elements such as lighting, trees, bus shelters, identification signs, and public art. Vertical elements will create a sense of enclosure and human scale, as well as, contribute to a positive identity for the corridor.

SEATING NODES

As the West Broadway corridor evolves more pedestrians will walk between homes, BLRT stations, bus stops, local grocery stores, shops, restaurants, and work places. Pedestrian seating nodes are proposed to be strategically placed along West Broadway midway between BLRT stations. They will provide users places of rest and places of interest. They will also help to break-up the visual monotony of long stretches of trail and fencing.

Three node types are proposed to accommodate a variety of site conditions including trail alignments and right-of-way space. See pages 42-44.

Streetscape Elements that may be incorporated at the three different node types may include:

- Seating elements
- Trash and recycle receptacles
- Bike racks

 Lighting Bollards

Special paving

Landscape material

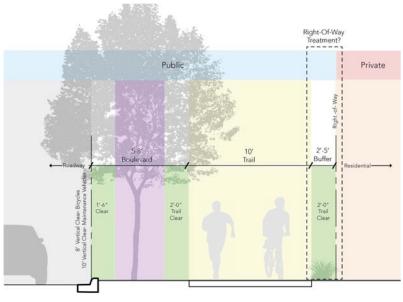
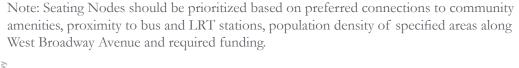
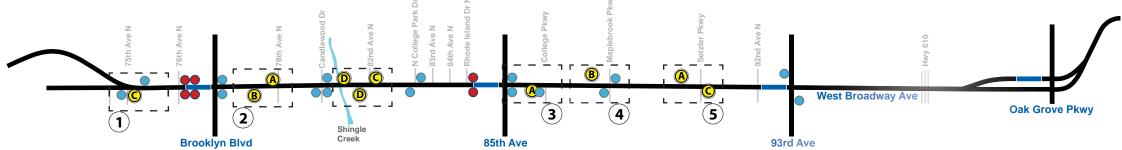


Figure 4.1 - Typical Trail Cross Section Along West Broadway Avenue





- A Seating Node Type A Boulevard
- **B** Seating Node Type B Jogged Trail
- © Seating Node Type C Street Corner
- Seating Node Type D Shingle Creek Overlooks
- Bus Stop with Shelter (includes lights and bench)
- Bus Stop without Shelter

Figure 4.2 - Overall Corridor Showing Locations of Pedestrian Seating Nodes, LRT Stations, and Bus Stops









Figure 4.6 - Node B

Figure 4.7 - Nodes A and C

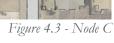


Figure 4.4 - Nodes A and B

Figure 4.5 - Node A

STREETSCAPE FRAMEWORK MANUAL

SEATING NODE TYPE A: BOULEVARD SEATING

Seating Node Type A places the seating area within the proposed boulevard allowing for the trail to remain consistently straight. Seating cubes are proposed to minimize the space consumed for seating and maximize the space for separation from the street. The seating cubes allow user to sit in 3 directions. Bollards, ornamental grasses, and trees are proposed between the seating cubes and the curb to provide a sense of separation from the street.

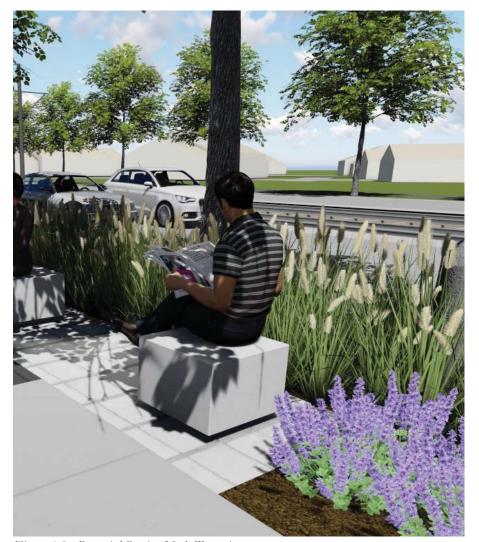


Figure 4.8 - Potential Seating Node Type A

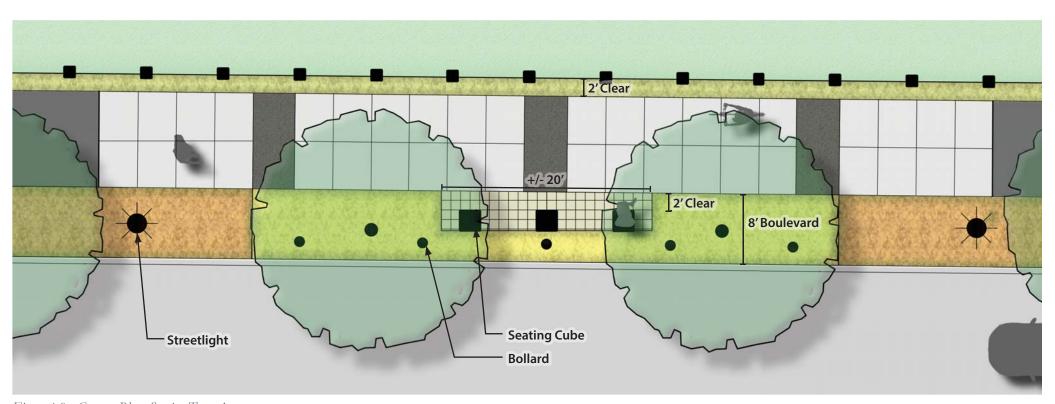


Figure 4.9 - Concept Plan, Seating Type A



Figure 4.10 - Potential Seating Node Type A

SEATING NODE TYPE B: JOGGED TRAIL

Seating Node Type B jogs the trail in order to:

- allow for seating nearest the fence
- provide enough space to incorporate seating while maintaining a 2 ft. clear zone to the trail
- provide the greatest separation for users from the street
- highlight the seating area with additional landscaping
- break up the visual monotony of long stretches of fencing



Figure 4.11 - Potential Seating Node Type B

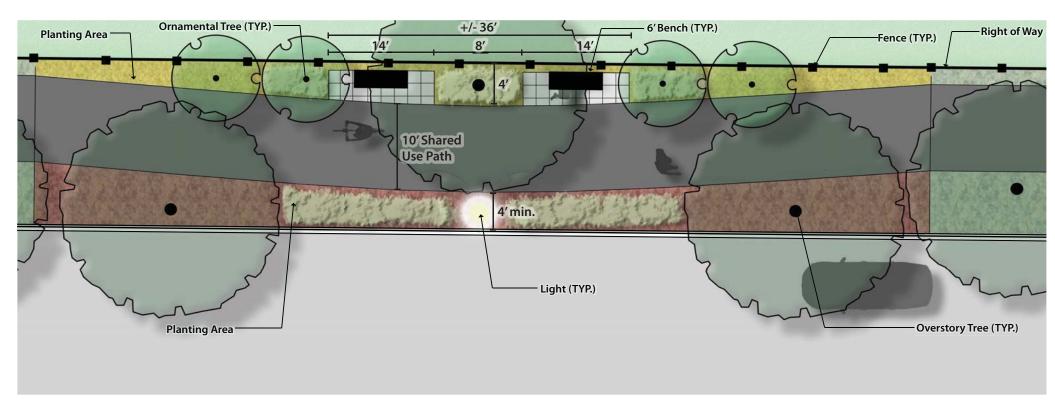


Figure 4.12 - Concept Plan, Seating Node Type B



Figure 4.13 - Potential Seating Node Type B

SEATING NODE TYPE C: STREET CORNER

Seating Node Type C is intended to be located at street corners where proposed diagonal R.O.W. provides substantial space. Nodes at these corners provide and opportunities for streetscape enhancements such as seating, public art, and neighborhood markers.

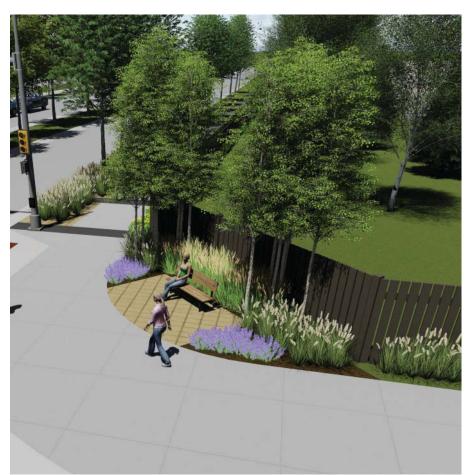


Figure 4.14 - Potential Seating Node Type C



Figure 4.15 - Concept Plan, Seating Node Type C



Figure 4.16 - Potential Seating Node Type C

WEST BROADWAY STREET LIGHTING

Street and Pedestrian level lighting is one of the primary streetscape elements that is essential to creating a safe environment and shaping the character and scale of the street corridor. Lighting associated with the West Broadway streetscape could have a life cycle of over 30 years and represents a significant investment in materials, maintenance and energy costs. Careful consideration should be given to selecting lights that express the desired character, are energy efficient, and use high quality materials to withstand the harsh environmental conditions.

WEST BROADWAY LIGHTING ANALYSIS

Currently, lighting on West Broadway (CSAH 103) from 71st Avenue North to Candlewood Drive consists of High Pressure Sodium (HPS) cobra head style fixtures mounted onto in-place power poles (see Figure 4.17) at unsignalized intersections. HPS Cobra head style fixtures mounted onto fiberglass poles (see Figure 4.19) provide intersection lighting from 82nd Avenue North to 85th Avenue North. North of 85th to 93rd there is a combination of cobra heads on fiberglass poles and shoebox heads on fiberglass poles (see Figure 4.19). Lighting at signalized intersections has HPS cobra head style fixtures mounted onto the traffic signal luminaire extensions.

The current limits of the proposed street lighting improvements along West Broadway (CSAH 103) are an approximate 2.63-miles from 75th Avenue North to the 610 interchange. The limits of the street lighting plan could possibly extend further depending on what the City/County want to define as the project limits.



Figure 4.17 - Wood Utility Pole with Cobra Head



Figure 4.18 - Fiberglass Pole with Cobra Head

WEST BROADWAY STREET LIGHTING OPTIONS

In June of 2016, City staff, BPO Staff and Xcel Energy met at the Bottineau LRT Project Office to discuss West Broadway Lighting opportunities and Xcel Energy's Group 5 offerings. In addition, the City is interested in understanding the lighting design options and comparative costs available by using lighting manufacturers outside of Xcel Energy's Group 5 offerings. Following is a summary of this comparative analysis.

OPTION A: XCEL ENERGY GROUP 5 LIGHTING

The base design lighting unit assumed for this analysis is Xcel's standard Light Emitting Diode (LED) cobra head fixture on a 30' fiberglass pole (see Figure 4.20). The LED cobra head is currently Xcel's only LED fixture offered in the Group 5 program. A CAD file of a "typical" proposed roadway segment was provided to Xcel for use in providing a photometric analysis and preliminary lighting layout. From this, the number of fixtures required was calculated for the limits of the proposed reconstructed West Broadway, with limits from 75th Avenue to the Hwy 610 interchange.

The pole spacing from the photometric report performed by Xcel utilized an alternating pole spacing pattern of 125 feet to 155 feet. Assuming an average spacing of 140 feet, this results in an approximate total of 190 lights within the corridor.

Xcel provided an average installation cost per pole of \$3,825 on the Group 5 rate. Using this amount, the anticipated preliminary cost for lighting the roadway is over \$726,000, based on per current (2016) installation costs.

OPTIONS OUTSIDE OF XCEL ENERGY'S GROUP 5 OFFERINGS

A community engagement process was utilized to identify the general preferences for the character of the lighting fixtures. The selected fixtures express a timeless quality with an LED lantern. The design team including landscape architects and engineers chose the Contemporary Lantern (see Figure 4.21) based on photometric performance and style. Several manufacturers offer similar designs and photometric performance. An 18 ft. Lumec LED fixture was utilized for the basis of this analysis.



Figure 4.19 - Fiberglass Pole with Shoebox



Figure 4.20 - Fiberglass Pole with LED Cobra Head



Figure 4.21 - Contemporary Lantern

LIGHTING

OPTION B: 18-FOOT TALL CONTEMPORARY LANTERN AT 120' SPACING

A photometric analysis was performed on a one mile stretch of W. Broadway from 85th Ave. N. to 93rd Ave. N. to meet established roadway lighting guidelines. The analysis determined that an 18-foot pole spaced 120 feet apart will be needed to meet the guidelines for lighting the trails and roadway.

Based on this conceptual design, 207 lights would be needed to light the approximate 2.63-miles from 75th Avenue North to the 610 interchange. Using an average of \$7,615 per light, the preliminary cost for lighting the roadway is approximately \$1,576,000 per current (2016) estimated installation costs.

OPTION C: 18-FOOT TALL CONTEMPORARY LANTERN OPTION MODIFIED SPACING

This third option explores reducing the number on lights between station blocks to reduce the overall costs. The basis of this design is the 18' Tall LED Lantern as used in Option B. The 120-foot spacing would be maintained for the most areas anticipate to have the most pedestrian activity including the blocks with LRT stations and those immediately

adjacent to the north and south. The light spacing would increase to 180-foot for the segments in between the high activity areas.

Under this scenario approximately 178 lights would be utilized within the 2.63mile corridor. Using an average installation costs of \$7,615 per light, the preliminary total cost for lighting the roadway and trail is approximately \$1,355,000 per current (2016) installation costs. This option however, does not meet the minimum roadway and trail lighting guidelines in the areas with 180 foot spacing.

RECOMMENDATIONS

OPTION 1: COLLABORATE WITH XCEL ENERGY TO EXPAND GROUP 5 LED FIXTURE AND POLE OPTIONS

Preferably, the selected lighting fixtures proposed for the West Broadway Streetscape would be an option made available through Xcel. The electrical engineering, locations of light bases, conduits, and control boxes would have to be completed prior to reconstruction of the streetscape and coordinate with the other streetscape and utility improvements. This option will most likely be the least expensive and require the least maintenance. It will also provide the most flexibility to the City for phasing.

OPTION 2: CITY PURCHASE LIGHT FIXTURES
SEPARATELY FROM THE LRT PROJECT AND SUPPLY TO
THE LRT CONTRACTOR FOR INSTALLATION

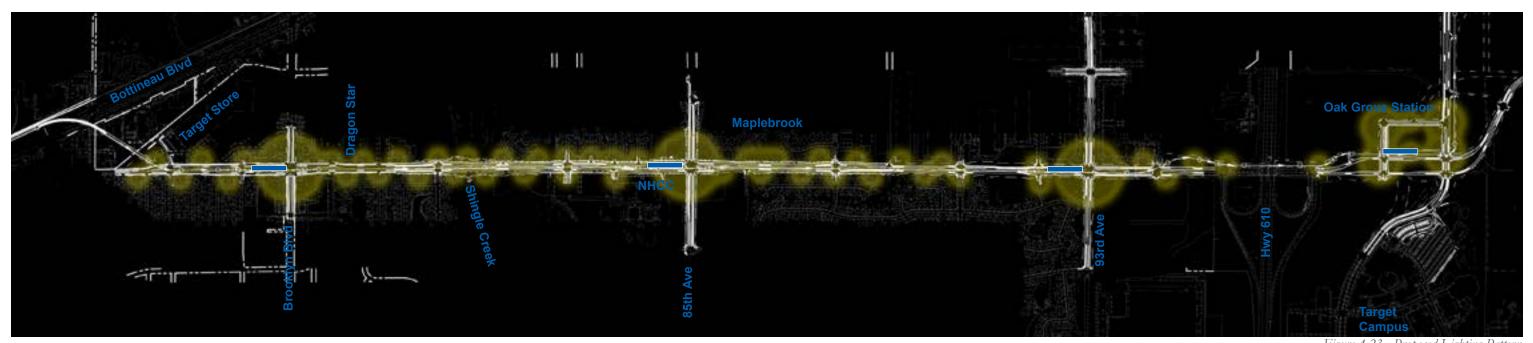
This option will require electrical engineering and installation of light bases, conduits, control boxes, and fixtures to be included as part of the LRT project. This option will allow the city to purchase the best light fixtures and poles to meet their objectives. It will also avoid additional "Buy America" criteria, contractor mark-ups, contingencies, and sales taxes associated with a federally funded project.

OPTION 3: THE CITY SELECTS A FIXTURE TO BE INCLUDED IN THE WEST BROADWAY RECONSTRUCTION PROJECT

This option will allow the city to have the best light fixtures and poles to meet their objectives. However, "Buy America" criteria, contractor markups, contingencies, and sales tax associated with a federally funded project will be included in the costs to the City. This option will also require electrical engineering and installation of lights bases, conduits, control boxes, and fixtures to be included as part of the LRT project.



Figure 4.22 - Contemporary Lantern example representative of character preference



LIGHTS

STREET LIGHTS

PEDESTRIAN LEVEL LIGHTS

SPECIALTY LIGHTING









Figure 4.25 - Light Spire Examples



Figure 4.26 - Columnar Projector Light Example, Brooklyn Boulevard



Figure 4.27 - Custom Lighting Example, Brooklyn Boulevard

FENCING

The goal for the proposed fencing along West Broadway is to create a cohesive, low maintenance, and visually pleasing screen that gives residents privacy and a secure property line. The base project includes a six-foot composite fence along impacted residential properties.

Through public engagement processes and design explorations, composite fencing was deemed to be the preferred option - potentially gray in color to give the corridor a more cohesive, updated aesthetic. Gates can be included as an option if desired by individual property owners.



Figure 4.28 - Conceptual rendering of backyard along West Broadway without a fence



Figure 4.29 - Conceptual rendering of a typical backyard along West Broadway Avenue with a fence

FENCING

BASE OPTION - 6' WOOD FENCE



Figure 4.30 - Six-foot wood fence along West Broadway Avenue (with optional gate)





Figure 4.31 - Examples of wood fence and optional gate

ENHANCEMENT OPTION - 6' COMPOSITE FENCE



Figure 4.32 - Six-foot residential composite fence along West Broadway Avenue (with optional gate)



Figure 4.33 - Examples of composite fence and optional gate

SIDEWALK AND TRAIL PAVING

The approach to pedestrian and bicycle paving is to use a simple, economical pattern and materials in the less traveled areas and a more intense use of decorative materials and patterns in special gathering areas, entry points, and bus stops. Contrasting colors of concrete, bituminous, and pavers are recommended for durability and to visually define through lanes, bus stops, and seating areas in high use segments of the corridor.







Figure 4.34 - Examples of Sidewalk and Trail Paving

METRO TRANSIT BUS SHELTERS



The transit stops are one of the most active pedestrian gathering spaces and identifying elements within the corridor streetscape and should be designed to be comfortable and dignified to attract ridership. Currently, the standard Metro Transit shelter is planned within the corridor.



Figure 4.35 - Metro Transit Bus Shelters

COMMERCIAL PARKING BUFFER

One of the objectives of the streetscape is to provide solutions for the treatment of parking lot edges that are flexible and may adapt to a variety of site conditions and budget constraints. To enhance the image of the area, parking lot buffers are proposed along all the parking lot frontage. The buffers can be a combination of low walls or decorative railings, hedges, native perennials and trees.



Figure 4.37 - Wall Buffer Option



Figure 4.38 - Railing Buffer Option



Figure 4.39 - Bollard Buffer Option

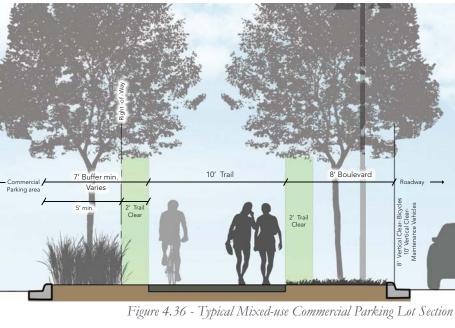




Figure 4.40 - Vegetated Buffer Option







Figure 4.41 - Commercial Parking Buffer Examples

SITE FURNISHINGS

The benches, trash receptacles, bike racks, bollards, and other furnishings should be chosen based upon their compatibility with the overall design theme, ease of maintenance, recycling collection, and durability. The City maintenance staff prefers surface mounted furnishings for ease of removal and replacement.

SEATING CUBES



Figure 4.42 - Seating Nodes with Seating Cubes

BENCHES



Figure 4.43 - Seating Nodes with Bench







Figure 4.44 - Bench Examples

SITE FURNISHINGS

BIKE RACKS







Figure 4.45 - Bike Rack Examples

TRASH RECEPTACLES/RECYCLING





Figure 4.46 - Trash Receptacle Examples

STREETSCAPE ELEMENTS

CROSS STREET MEDIAN TREATMENTS

Landscaped medians are proposed in the long term within the primary cross streets to:

- Reduce the perceived scale of the street, and reinforce the corridor as a gateway to Station Area.
- Provide a safe refuge for pedestrians attempting to cross the avenue
- Provide a traffic calming effect by reducing the perceived width of the street.

RECOMMENDATIONS

The recommended treatment is to utilize overstory trees as the main component to provide a sense of enclosure to the street and allow for visibility underneath the canopies. Station blocks and entry areas to the corridor should be accentuated with more intense plantings in select areas of perennials and low growing shrubs.

The landscape design of the medians should be cost effective and low maintenance. The treatment must also be able to withstand the extreme urban conditions posed by road salt, sandblasting from snow plows, and drought. The medians should be equipped with both irrigation, drain tile, uncompacted planting soil, as well as electrical power for seasonal lighting and gateway elements.

Several options exist for ground layer treatments ranging from low maintenance materials such as stone mulches and decorative paving to higher maintenance treatments like ground covers, perennials, shrub massings and grass. The final selection of materials will depend on the commitment the city is willing to make toward initial installation and maintenance costs.



Figure 4.47 - Cross Street Median at Brooklyn Boulevard



Figure 4.48 - Cross Street Median at 85th Avenue



Figure 4.49 - Cross Street Median at 93rd Avenue

STREETSCAPE ELEMENTS

STORMWATER







Figure 4.50 - Stormwater Examples

TREES AND OTHER PLANT MATERIAL

Plant materials should be selected based on their ability to survive the urban conditions of snow, salt, drought, and in some areas, compacted and alkaline soils. Hardy indigenous species should be chosen for reliability, form, scale, texture, and seasonal interest. The streetscape plan recommends a clustered pattern for boulevard trees to maintain visibility to shops and signs and to avoid a regimented appearance. Clustering also facilitates the creation of large beds of uncompacted modified soil to promote plant vitality. Trees placed underneath power lines will need to be selected based on mature heights that will not conflict with overhead wires. A separate process will be completed to define appropriate plant materials, modified soils, irrigation, and other detailed landscape treatments.

Refer to the appendix for lists of trees recommended by Xcel Energy for planting under or near distribution power lines.

WAYFINDING

A cohesive system of wayfinding signs and kiosks should be considered to help direct visitors to public parking, institutions, amenities, and other places of interest throughout the corridor. Wayfinding can also be designed be interpretive and to inform users about community culture, events, ecology and history.

Consideration should be given to incorporating a hierarchy of signature vertical elements such as, specialty lighting, or wayfinding monuments that repeat along the corridor to identify station areas, district, or key points along the corridor to strengthen continuity and the identity of West Broadway Avenue as a unique place. Specialty lighting or community branding elements placed at the intersections should consider reflecting the simple and bold architectural character and materials of the station designs.















Figure 4.51 - Wayfinding Examples

Implementation Strategies

Even the best plans are of little value if they are not implemented. Implementation of the opportunities outlined in this document is dependent on proactive leadership of the community and collaboration between Metro Transit, Hennepin County, City officials and departments, property owners, the business community, civic organizations, and developers.

The West Broadway Corridor has been evolving into its current pattern of development for over a century. Even with a strong commitment, it will take a number of years before many of these recommendations take full shape. Although the City's role in this process is an important one, the success of this effort will not be possible without the full support and participation of landowners, citizens and the development community.

A concerted effort has been made throughout this project to involve a broad cross-section of the community. Business owners, residents, elected and appointed officials, and community leaders have been invited to provide input and guidance. Their participation has improved the study and their continued participation and support will be critical in sustaining the community's commitment over time. The optimal results for this effort will only come if this study is also embraced by the private sector and if it guides both public and private investment over time.

ENHANCEMENT SELECTION PROCESS

Through March and April 2017, the Brooklyn Park City Council and City staff held a series of workshops to provide a forum to review the streetscape options and to make informed selections for enhancements. As a separate document containing a comprehensive outline of the streetscape enhancement options, associated quantities, estimated costs, and funding participation was created to assist with project understanding and decisions regarding investments in the public improvements.

As outlined previously in this document, the base streetscape project to be built with the BLRT and street reconstruction project includes:

- Concrete pavement for all corners.
- Concrete pavement on both sides of the street for mixed use trails on the blocks within station areas.
- Bituminous pavement for the trails outside of the station blocks.
- Turf for boulevards and landscape areas between the back of walk and right-of-way.

- Roadway lighting at signalized intersections
- Stormwater facilities
- Six-foot composite fence in residential areas
- Bike racks
- Bus shelters
- Station light spires
- Ornamental railing at McDonald's and Broadway Square
- 1. Pedestrian level corridor lightin

SELECTED ENHANCEMENTS

Following is an outline of the enhancements selected by the City Council for inclusion in the streetscape. It should be noted that the final elements to be included in construction could change.

Enhancements for West Broadway Avenue (74th Ave to Highway 610)

- 1. Bury Xcel Energy Distribution lines: 74th Avenue to Setzler Avenue
- 2. Street Trees clustered pattern
- 3. Shrubs and perennials
- 4. Irrigation
- 5. Pedestrian level corridor lighting
- 6. Trail Node Type A: Seating Cubes in Boulevard (3)
- 7. Trail Node Type C: Corner Seating (3)
- 8. Special Corner Treatments: Brooklyn Boulevard
- 9. Special Corner Treatments: 85th Ave N. (SE and SW corners)
- 10. Special Corner Treatments: 93rd Avenue N. (SE corner)
- 11. Sidewalk Market: Brooklyn Boulevard
- 12. Brooklyn Boulevard: 1 corridor gateway element
- 13. 85th Avenue N: 1 corridor gateway element
- 14. 93rd Avenue N: 1 corridor gateway element; reduced length of median and boulevard planting
- 15. Shingle Creek Overlook (defer interpretive kiosk/wayfinding element)

Enhancements for Streets North of Highway 610

- 16. Trees along side streets
- 17. Shrubs and perennials along side streets
- 18. Trees along West Broadway Avenue
- 19. Shrubs and perennials along West Broadway Avenue
- 20. Lighting
 - West Broadway from Hwy 610 off ramp to 100th Avenue where it turns onto Winnetka Avenue
 - Oak Grove Pkwy from Target campus limits of disturbance to 2 blocks west of Brooklyn Boulevard
- 21. Station area lighting feature
- 22. Paving
- 23. Gateway Element
- 24. Irrigation
- 25. Xcel Energy Distribution Burying
 - Oak Grove Parkway (West Broadway Avenue)
 - Oak Grove Parkway (101st Avenue)/Winnetka Avenue

PHASING

The West Broadway Streetscape Framework Manual has identified a preliminary time frame for implementing the streetscape design, which falls into three categories: short-term improvements to be built with the BLRT Project, mid-term improvements to be implemented outside of the BLRT project, and long-term improvements that will evolve as the corridor redevelops. Some of the short term initiatives may be built as part of the project or are initiative implemented by the City outside of the project with the goal of being done by opening day of the Bottineau LRT line.

Implementation Strategies

IMPLEMENTATION STEPS:

The public improvements associated with the BLRT and West Broadway Streetscape will act as a catalyst for reinvestment and represent a positive step toward ensuring a vital long-term business climate and livability for the area. This section includes action steps that should be considered to integrate the improvements into an ongoing community-building strategy, and to gain the most benefit from transportation and streetscape improvements.

A. LIGHTING

Collaborate with Xcel energy to expand Group 5 LED fixtures and pole options.

The preference of the City is to utilize lighting fixtures available through Xcel. The electrical engineering, locations of light bases, conduits, and control boxes would have to be completed prior to reconstruction of the streetscape and coordinated with the other streetscape and utility improvements. The following will be required in order to advance the lighting design in the short term:

- a. The City will have to contract with Xcel to prepare the lighting design and associated electrical engineering.
- b. Coordination is crucial for Xcel's scope and schedule to integrate into the BLRT schedule and engineering and design as well as review, bidding, and construction process.
- c. Photometric studies for the selected lights must be completed and coordinated with other intersection and station lighting to achieve the proper lighting levels.
- d. A clear understanding of lighting support infrastructure needs and locations such as, light bases, control boxes, conduits, sleeves, hand holes and other elements.
- e. Define components such as sleeves and conduits that may best be bid and installed as part of the LRT project.

B. ADOPT TRANSIT ORIENTED DEVELOPMENT (TOD) ORDINANCE FOR STATION AREAS

As recommended in the Brooklyn Park Station Area Plan, a TOD ordinance should be adopted by the City of Brooklyn Park for the areas within .5 miles of each station. This ordinance is critical for successful redevelopment of the corridor, the streetscape, and to support the overall projects goals to:

- Maximize and strategically align public and private investments in the corridor to support transit-oriented development (TOD) through catalytic investments in life-cycle housing, commercial development, and public infrastructure.
- Promote economic opportunity by improving access to jobs and supporting business recruitment and expansion along the corridor.
- Enhance livability in the corridor by improving public spaces, supporting the creation of healthy communities, and connecting people to key destinations, including employment centers, educational institutions, and regional amenities.

The ordinance will need to reinforce the relationship of future development to the West Broadway streetscape specifically by addressing the following:

- "Build-To" lines, building massing, materials, land uses and additional streetscape treatments that shape a pedestrian scaled corridor and promote an active center of activity while directing safe bicycle and pedestrian movements. Build-to lines are particularly important at the Brooklyn Boulevard and Oak Grove Grand Boulevard segments where additional sidewalk may be needed to accommodate an increase in pedestrian and bicycle activity. Consideration should be given to defining build-to lines that will provide the space needed for both a cycle track and a separated pedestrian sidewalk.
- Placement of parking facilities, design and installation of parking lot landscape buffer treatments: To enhance the image of the area, parking should be placed behind and/or to the sides of buildings. Where parking fronts the streets, parking lot buffers are proposed along all the parking lot frontage. Treatments should be flexible and adapt to a variety of site conditions and budget constraints. The buffers can be a combination of low walls or decorative railings, hedges, native perennials, and trees. Design objectives, setbacks, materials and other requirements should be built into the proposed TOD Ordinance.
- Shaping the South Gateway at 74th Avenue by strategically placing buildings, open spaces, and storm water facilities as illustrated in the redevelopment plan prepared by Urban Design Associates.
- Strategic incorporation of open spaces adjacent to the corridor such as, the market at Brooklyn Boulevard, and the Fine Arts Plaza at 85th Avenue.

C. BROOKLYN BOULEVARD CORNER TREATMENTS: PUBLIC ART, EVENTS, AND INSTALLATIONS

In order to incorporate public art elements by opening day within the corner plazas at Brooklyn Boulevard as well as 85th and 93rd Avenues, the planning needs to start as soon as possible. Public art competitions and urban prototyping events can leverage regional talent and generate community involvement and excitement for the project.

The West Broadway Streetscape presents the City of Brooklyn Park an opportunity to create innovative policies and procedures to integrate art that is informed by contemporary best practices for public art processes. To implement public art projects the City should consider the following:

- Resources for procedures in administering a public arts program are
 available through private consulting services as well as the Minnesota State
 Arts Board. They include how to determine a public art strategy and plan,
 scope of work for public art projects, produce open or invitational calls
 for artists, conduct artist selection meetings, develop contracts with artists
 for design proposals, and commission artwork.
- Setting base-line funding for each project that take into account the
 relative importance and scale of the project. Appropriate media and
 materials and the expectation for community involvement should be
 considered in setting schedules, budgets, and the creation of the artwork.
- Establishing a flexible funding model that utilizes city funds to leverage private and foundation funds, in addition to other sources
- That an experienced public art project manager will likely be needed to develop and carry out public art projects on an ongoing basis.

D. SHINGLE CREEK MONUMENT/KIOSK

- Coordinate design options and potential funding participation with the Shingle Creek Watershed District. In addition to the overlook structure, the design options could include interpretive displays of Shingle Creek's role in the ecology and development of the community, as well as wayfinding/identity monuments that celebrate the creek while also directing users to the regional trail connections.
- The overlooks should be designed to accept a future kiosk. The location of future footings for the monument/kiosk will be limited by bridge design parameters, subsurface pipes, culverts, and geotextile fabrics utilized for reinforced soil slopes. The potential locations will be noted on the construction plans.

Implementation Strategies

E. 85TH AVENUE

• NHCC Parking Lot Buffer

NHCC is exploring ways to redesign their parking lot to be more efficient, improve circulation, and accommodate the new entry point on West Broadway Avenue. The buffer design should accommodate a reduced area and snow storage needs by utilizing overstory trees, native perennial grasses, and shrubs that can handle snow piling and bumper overhangs.

• Community Fine Arts Plaza

Continue to collaborate with Hennepin County and the College to incorporate the community fine arts plaza as the centerpiece for the future Center for Fine and Performing Arts and the Hennepin County Library at the northeast corner of the intersection.

• NHCC Plaza at 85th Avenue

Continue working with the College to consider a potential linear plaza as a welcoming front yard to the NHCC campus and an outdoor studying and gathering area. The plaza could be a temporary installation that anticipates reconstruction of a new Center for Student Services at the southeast corner of West Broadway Avenue and 85th Avenue.

Collaborate with the NHCC to balance an appropriate amount of bicycle racks and storage facilities associated with the BLRT and campus expansion.

• Continue Tradition of Public Art

Throughout the NHCC campus and the library campus are sculptures that reinforce this district as a "Cultural Hub". This tradition should continue by incorporating sculptures or other forms of public art at the southeast and/or northeast corners of 85th Avenue. A public arts competition could be considered as a community building effort that leverages local talent and the College arts department.

F. COORDINATE OBJECTIVES WITH ALL CITY DEPARTMENTS

The planning, engineering, and inspections departments, as well as a potential advisory group, should refer to the guidelines and associated public/private improvements and amenities when reviewing individual development proposals within the study area. Each proposed development should comply with the guidelines, reinforce the desired character of development, and contribute to creating a cohesive, pedestrian-friendly, memorable, and economically viable place.

G. DEVELOPERS SHOULD WORK WITH THE CITY STAFF AND REFER TO THE FRAMEWORK PLAN AND THE FUTURE TOD ORDINANCE

Prior to generating design concepts, developers should collaborate with the City staff and refer to the Framework Plan as well as any future TOD ordinance in order to better understand how their property fits into the context of the Framework Plan and expectations for public/private amenities.

The guidelines for site planning, building placement, parking lot edge treatments, and landscaping should be referenced during the site design phase of the project. Developers should also discuss options for their particular site with City staff to understand how improvements will affect their development proposals and which improvements will be constructed as part of the BLRT project and which will be their responsibility.

H. PLACE PROJECTS IN THE CAPITOL IMPROVEMENT PLANS

City departments should refer to the components in this manual to coordinate, design, and budget for capital improvements and to design public/private partnerships to finance and maintain public realm projects.

I. DEFINE A MAINTENANCE STRATEGY FOR EACH PROJECT

The long-term maintenance of the improvements and associated costs are a critical consideration for the success of the streetscape. A strategy should be created that defines a funding source and assigns responsibility for maintenance of the various streetscape components.

BENEFITS

A key benefit of the design process and this summary document is the creation of a solid community based foundation and framework from which decision makers may assess funding, ownership, and maintenance commitments.

As of this writing this framework manual has already been used to:

- Inform 90 percent design plans for BLRT and CSAH 103 reconstruction including which enhancements will be part of the construction documents and those be implemented by others.
- Inform cost participation strategies for agency partners.
- Provide guidance to the Brooklyn Park City Staff and City Council for the selection of streetscape elements, cost and maintenance strategies.
- Influence Xcel Energy to reduce the number of transmission line poles within the Grand Boulevard north of Highway 610.
- Assist property owners with making informed decisions regarding their property and how it relates to the future corridor.
- Assist the City and property owners with planning the public market space proposed at Brooklyn Boulevard.
- Provide a public realm framework for proposed Transit Oriented Development (TOD) ordinances around the station areas.

MAINTENANCE MEETING SUMMARY

Date: July 12, 2016

Attendees:

Alicia Vap, BPO

Chad Ellos, Hennepin County

Jesse Struve, City of Brooklyn Park

Kelley Yemen, Hennepin County

Ellen Sones, Hennepin County

Dustin Ellis, Hennepin County

Geoff Martin, Kimley-Horn

Dan Ruiz, City of Brooklyn Park

Steve Nauer, City of Brooklyn Park

Greg Hoag, City of Brooklyn Park

STREET TREES AND PLANT MATERIALS

- The County Forester provided input on recommended tree species based countywide and on recent CSAH 81 corridor experience: Elms, Austrian Pine/Black Spruce, Kentucky Coffee, Japanese crosses of Elms, Gingko, Hackberry.
- Future discussion is warranted on plant establishment/ plant warranty period.
- For City maintained landscaped areas—minimize (or zero out) mowable areas; some plant beds requiring low maintenance preferred (tall grasses?)
- Height of landscaping needs to be considered—visibility,
- The City will be responsible for maintaining all elements between the curb and ROW.
- City has discussed implementing a special service district in the long term for the Brooklyn Boulevard area
- Discussions have occurred regarding private businesses wanting to landscape and take on maintenance
- The City and County want NO additional right of way impacts unless agreeable to residential property owners.

SNOW REMOVAL

- The City does not use chemicals or salt for snow removal/ice on trails.
- The City will use a "v" plow on the trail, so snow storage will be on both sides.
- Shade canopy along the trail is good from a bike and pedestrian vantage point.

BIKE AND PEDESTRIAN FACILITIES

- Intersections: The City is interested in Dutch corners, similar to 66th and France in Edina.
- The design should recognize salt impacts on plantings for Dutch corners. Partners open to variations on the design recognizing the primary purpose is to encourage bike and ped user movement to crosswalks.
- Station area intersections—how can we divide the bike and pedestrian uses?
- The City does NOT want colored concrete on sidewalks.
 Difficult in terms of maintenance, color durability, etc.
- City would potentially concede to dark gray concrete in the station intersection area as a way to transition trail to sidewalk.
- The City does not want broad use of pavers, particularly in the walking path as they can be tripping hazards.
 Pavers used for infiltration purposes must be strategically located in order to reduce maintenance issues, particularly in areas where no plowing is needed.

BROOKLYN PARK STATION DESIGN MEETING: CONTEXT AND CHARACTER WORKSHOP (JUNE 22, 2016)

This workshop was held to understand community members' desires for the character and context of the proposed station areas in Brooklyn Park.

BROOKLYN BOULEVARD

- Busy, Auto-oriented, Asphalt
- Destination, lot of pedestrians from south & east
- Commercial hub
- Loss of trees-
- Hard to navigate for autos

OPPORTUNITIES

- Transit connections
- Intensification/redevelopment
- Pedestrian walkways through parking lots
- Students walk to gym
- Plaza, pocket park Connections to Starlite Transit
- Overhang for seating
- Trees over walkways
- Future pedestrian circulation will increase
- Facilitate Pedestrian safety
- Station & streetscape inform one another
- Ethnic business at three corners
- Untapped vibrancy
- Diversity of area, storefront, pedestrians
- Art opportunity
- Gets dark early in winter Need lighting
- Signage, wayfinding for unique district

CHARACTER

- Want timeless feel (much potential)
- Make 100 % corner fabulous
- Feel visible
- Use color for vibrancy
- Artsy pavement, mosaic art on walls, colored, graphic pavers
- Cultural
- Expression of community Colorful, vibrancy
- Needs to be people friendly
- Vibrant
- Transportation hub
- Contemporary
- Expansive
- Horizontal
- High activity
- Crossroads
- Setback storefronts
- Farmer's Market

85TH AVENUE

- Library -Learning
- Students 10,000 enrolled
- Loss of trees
- Transition from public to private spaces o
- College growth to north 4 year degrees
- Fine art
- Uses are internally focused o Maple Brook & NHCC
- Pedestrians lack facility, Walk from bus stop to NHCC
- Harsh environment for pedestrians
- Residential uneasiness about LRT

OPPORTUNITIES

- Destination to walk to (i.e. Broadway Square)
- Bus stops Hub, high ridership
- Become generationally used
- Space for high off-boarding on platform
- A lot of parking
- Plaza, connections
- Destination for more users, draw for new students
- Less use of parking lot with carpools
- Potential for redevelopment of Broadway Square -Connect to student use
- Center station no dwelling
- Edges as, if not more, important than station
- Not a beacon, station should blend in
- Winter heating element placement
- Civic space
- Pride for institutions

CHARACTER

- Progressive/modern design of adjacent buildings o Bioscience o HC Library
- Station blends with modern architecture
- Future arts & education feel
- UDA observations: Civic character the cultural hub
- Traditional character and details
- Highlight social interaction bringing all ages together
- Campus
- Community center of Focus

BROOKLYN PARK STATION DESIGN MEETING: CONTEXT AND CHARACTER WORKSHOP (JUNE 22, 2016)

93RD AVENUE

- Hotel potential
- Ebenezer Church at SE
- Employment destination
- Peak hours, commuter traffic
- Feels isolated because of setback
- Big setbacks, campus feel, greenspace
- Storm water space eats up developable land
- Medical technology, precision/biomedical manufacturing
- Will change uses
- LRT important to business, design ready control reloc. for LRT
- High quality manufacturing jobs Engineering
- Low rise, large footprint
- CSM windows/doors connection (to intersection corner)
- Auto oriented/dependent
- High volume turn movement
- Not distinctive

OPPORTUNITIES

- Cultural center/gathering at church
- Make friendly for pedestrians to cross parking lots
- Will draw more industry, talent from region
- Unique biopharma. Takeda
- Completion of 610, draw more traffic
- Connections needed from station to destination Need pedestrian facility at 92nd o Secondary platform access
- Transition of land use
- Residents support new church
- Parking in neighborhood concerns
- Roof space as sustainability opportunity
- Trail, greenspace for employees, bike facilities
- Ridership by choice, lifestyle
- Needs to attract to draw transit users
- Bus circulation anticipated privately

CHARACTER

- Design shouldn't overcompensate /be too fancy or overdone
- Understated
- Industrial character
- Public art related to innovation/employment
- Need focal point

OAK GROVE PARKWAY

- Commercial/retail to east
- Hard to imagine urban future
- Energy
- Height & verticality
- Vision unknown
- Urban density
- Beginning of the line
- Expansive nature of land

OPPORTUNITIES

- Potential to be national example of TOD
- One seat ride to MSP/MOA
- Signature area Put BP on map
- Signature park Connections to park & ride
- Community expectation for areas (signature/great)
- Downtown mix of uses Complete neighborhood
- Center-focused, not a gateway
- Balance of park & ride and the place/surroundings
- Park & ride not iconic (design) Not a beacon or symbol
- Should be intuitive to get from park & ride to station -Clear connections
- Incremental development
- Proximity to highways

CHARACTER

- Design quality expectation People centered,
- Inviting, Warm, Active
- Place to be, huburb, "a place"
- UDA observations: Modern, Contemporary, Nature, green, parks (Rush Creek Trail), Edge of development
- Grand boulevard
- More than Target (no bullseye)
- Urban Grand place
- Hard to avoid corporate campus feel
- City Center

"URBAN STREET TREES: BENEFITS OF URBAN STREET TREES", BY DAN BURDEN, 2006

1. Improved business:

According to the National Complete Streets Coalition, Businesses on treescaped streets show 10 to 12% higher income streams.

2. Added value to homes, businesses and tax base:

Realtor based estimates of street tree vs non street tree comparable streets relate a \$15,000-25,000 increase in home or business value. This often adds to the tax base and operations budgets of a city allowing for added street maintenance.

3. Longer pavement life.

Studies conducted in California show shade of urban street trees can add from 40-60% more life to costly asphalt based on reduced daily heating and cooling of asphalt.

4. Less drainage infrastructure.

Trees absorb the first 30% of most precipitation through their leaf system, allowing evaporation back into the atmosphere. This moisture never hits the ground. Another percentage (up to 30%) of precipitation is absorbed into the ground and held by the root structure, then absorbed and transpired back to the air.

- 5. Boulevards provide snow storage and are an essential part of the operational side of a street.
- 6. Trees buffer views to utility poles, light poles, on-street and off-street parking and other features creating visual pollution to the street.
- 7. Reduced and more appropriate urban traffic speeds Through enclosure and visual cues to motorists to slow down.
- 8. Create safer walking environments by forming and framing visual walls and providing distinct edges to sidewalks so that motorists
- 9. Trees planting strips separate motorists from pedestrians and buildings

- 10. Trees increased security by creating more pleasant walking environments increasing walking, pride, and care of place
- 11. Reduced harm from tailpipe emissions

Automobile and truck exhaust is a major public health concern and contains significant pollutants, including carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NOx), and articulate matter (PM). Tailpipe emissions are adding to asthma, ozone and other health impacts. Impacts are reduced significantly from proximity to trees.

12. Lower Ozone:

Increases in urban street temperature that hover directly above asphalt where tailpipe emissions occur dramatically increase creation of harmful ozone and other gasses into more noxious substances impacting health of people, animals and surrounding agricultural lands

13. Absorb pollutants:

Trees in street proximity absorb 9 times more pollutants than more distant trees, converting harmful gasses back into oxygen and other useful and natural gasses.

14. Lower urban air temperatures:

Asphalt and concrete streets and parking lots are known to increase urban temperatures 3-7 degrees. These temperature increases significantly impact energy costs to property owners and consumers. A properly shaded neighborhood, mostly from urban street trees, can reduce energy bills for a household by 15-35%.

TREES AND OTHER PLANT MATERIAL

XCEL ENERGY TREE LIST

APPROPRIATE TREES—for	Size	Form	Rate ¹	Zone	Fall	Flower	Light ²	Culture/Comments
planting under or near					Color			
distribution power lines								

DECIDUOUS TREES

								ı
Acer glabrum Rocky Mountain maple	25'h 15'w	rounded	M	4-8	_	_	•	Multi-stemmed.
Acer triflorum three-flowered maple	20-30'h 20-30'w	spreading	S	4-7	yellow & red	white	00	Moist, well drained acidic soil. Lovely exfoliating golden amber bark.
Acer truncatum Shantung maple	20-30'h 20-30'w	rounded	S	4-8	yellow to red	_	00	Drought tolerant and hardy.
Aesculus pavia red buckeye	10-20'h 10-20'w	rounded	S	4-8	_	_	00	Well drained, acidic soil.
Amelanchier spp. serviceberry	20-30'h 12-20'w	columnar to oval	M	4-8	yellow copper to red	white pink	00	Can form thickets. White fruit. Select cultivars: 'Cumulus,' 'Majestic,' 'Autumn Brilliance,' 'Robin Hill.'
Betula occidentalis western water birch	25'h 20'w	pyramidal	M	4-7	yellow		00	Bark resembles that of cherry.
Carpinus caroliniana blue beech, ironwood	25'h 20'w	spreading	S	4-9	yellow orange- red		•	Best in deep, rich, moist soil. Withstands periodic flooding.
Cercis canadensis eastern redbud	20-30'h 25-35'w	rounded	М	4-9	yellow -green	pink	00	Wide range of pH. Does well in moist soil (not extremely wet). Legume.
Cercis canadensis 'alba' whitebud	20-30'h 25-35'w	rounded	М	4-9	yellow -green	white	00	Moist, well-drained soils. May be less robust than eastern redbud.
Cornus alternifolia pagoda dogwood	15-25'h 20-30'w	wide spreading	М	3-7	reddish -purple	yellow white	0	Keep root zone cool. Moist, acidic, well drained soil. Best in cooler climates. Fruit enjoyed by birds.
Cornus mas Cornelian-cherry	20-25'h 15-20'w	oval to rounded	М	4-7	purple- red	yellow	0	Prefers rich well drained soil. Wide range of pH. Bright red fruit.
Crataegus spp. hawthorn	15-30'h 15-35'w	rounded to oval	S/M	4-8	Vaughn scarlet Winter King red- gold	white red	О	Well drained soil. Tolerates urban stresses. Birds enjoy 1/2" red fruit that persists until late fall. Check cultivars for details. Select cultivars: 'Vaughn,' var. Inermis, 'Superba,' 'Ohio Pioneer,' 'Winter King.'

APPROPRIATE TREES—for	Size	Form	Rate ¹	Zone	Fall	Flower	Light ²	Culture/Comments
planting under or near					Color			
distribution power lines								

Hamamelis virginiana witch hazel	20-30'h 20-25'w	rounded	M	4-8	yellow	yellow	•	Moist soil. Somewhat tolerant of urban environment. Flowers in fall.
Magnolia stellata star magnolia	10-20'h 10-15'w	oval	S	4-8	_	white	О	Sheltered location in north. Prefers moist, rich well drained acid soil.
Malus spp. flowering crabapple	10-35'h 10-25'w	oval to rounded	var- ies	2-8	_	white pink red	0	Well drained acid soil. Very adaptable to soil types. Select cultivars: 'Adams,' 'Centzam,' 'Hargozam,' 'Jewelcole,' 'Mazam,' 'Prairiefire,' 'Professor Sprenger,' 'Red Barron,' 'Snowdrift,' 'Spring Snow,' 'Sutyzam' and more.
Prunus americana American plum	15-25'h 10-20'w	rounded	F	3-8	_	white	0	Very hardy tree thrives with neglect. Can form thickets. Fruit used for jams.
Prunus mandshurica Manchurian apricot	15-25'h 15-25'w	upright rounded	M	4-8	golden orange	white to pink	0	Rich, well drained loam. Fruit producing cultivars may not be hardy in the north. Har- dy cultivars include: 'Manchu,' 'Sungold' and 'Moongold.'
Prunus cerasifera purple leaf plum	15-20'h 15-20'w	rounded	M	4-8	_	pinkish white	00	Moist, well drained soil. Purple fruit in summer. Reddish-purple leaves.
Prunus maackii Amur chokecherry	20-30'h 18-25'w	oval to rounded	F	3-6	_	white	0	Fertile, well drained soil. Easily develops girdling roots. Beautiful amber- colored birchlike bark.

TREES AND OTHER PLANT MATERIAL

XCEL ENERGY TREE LIST

APPROPRIATE TREES—for	Size	Form	Rate ¹	Zone	Fall	Flower	Light ²	Culture/Comments
planting under or near					Color			
distribution power lines								

Prunus 'North Star' & 'Meteor' sour cherry	10-15'h 10-12'w	rounded	M	4	gold yellow	white	0	Well drained soil. Red berry used for preserves and eaten by birds.
Prunus virginiana 'Schubert' Canada red chokecherry	20-30'h 15-20'w	oval	M	3-8	_	white	0	Tolerates low fertility and dry sites. Dark red-purple leaves and fruit. Susceptible to insects and black knot. Hardy and attractive.
Pyrus calleryana 'Autumn Blaze' autumn blaze callery pear	25-30'h 25-30'w	rounded	M	3-8	orange/ red	white	0	Tolerant of wide range of pH. Urban and salt tolerant.
Quercus gambelii gambel oak	20'h 15'w	spreading	S	3-8	_	_	0	Low maintenance.
Salix discolor pussy willow	15-18'h 12-15'w	pyramidal to oval	M	4-8	_		О	Moist to wet soil. Multi-stemmed. Fuzzy silver catkins.
Sorbus alnifolia Korean mountain ash	20-30'h 20-30'w	pyramidal to oval	M/F	4-5	_	white	0	Well drained soil; pH adaptable. No polluted environments. Better lawn than boulevard tree. Does not do well in southern heat.
Staphylea trifolia American bladdernut	10-15'h 10-15'w	oval to rounded	M/F	4-8	dull yellow	green- ish white	•	Moist, well drained soil. Good for parks. Flowers are bell-shaped.
Syringa reticulata Japanese tree lilac	20-30'h 15-25'w	pyramidal rounded	М	3-7	_	creamy white	00	Full sun for best flowers. Loose, well drained acidic soil. Prefers cool summers.
Viburnum lentago nannyberry	15-30'h 15-30'w	oval	М	3-7	purple- red	white	00	Very adaptable to wide range of conditions.
Xanthoceras sorbifolium yellowhorn	18-24'h 10-15w	upright	M	4-7	_	white	О	Loamy soil. Tolerates high pH.

power lines

CONIFERS

Juniperus chinensis Chinese juniper	12-20'h 15-25'w	pyramidal	S	4-8	_	_	0	Tolerant of wide range of soils and pH and urban environment. Attracts birds. Selected cultivars: 'lowa,' 'Mountbatten,' 'Spartan.'
Juniperus osteosperma Utah juniper	25'h 20'w	pyramidal	VS	3-8	_	_	0	Provides good screen.
Pinus aristata bristlecone pine	8-10'h 10-30'w	spreading	S	4-7	_	_	0	Tolerates dry rocky sites and range of pH. No smoke polluted air.
Pinus mugo mugo pine	15-20'h 25-30'w	rounded to pyramidal	S	3-7	_	_	00	Deep moist loam. Tolerant of calcareous soils.
Taxus x media 'Hicksii' hicks yew	3-20'h 10-25'w	broad pyra- midal	S	3-7	_	_	00	Well drained, moist, neutral sandy to acidic loam.
Thuja occidentalis arborvitae	10-25'h 10-25'w	pyramidal	S/M	3-7	_	_	О	pH tolerant. Check specific cultivars for details.